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BEFORE THE ARIZONA CORPORATION COMMISSION

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AZ CORP COMMISSION
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2 COMMISSIONERS

3 KRISTIN K. MAYES - Chairman
4 GARY PIERCE
5 PAUL NEWMAN
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7 BOB STUMP

8 IN THE MATTER OF THE APPLICATION OF
9 GLOBAL WATER - PALO VERDE
10 UTILITIES COMPANY FOR THE
11 ESTABLISHMENT OF JUST AND
12 REASONABLE RATES AND CHARGES FOR
13 UTILITY SERVICE DESIGNED TO REALIZE
14 A REASONABLE RATE OF RETURN ON
15 THE FAIR VALUE OF ITS PROPERTY
16 THROUGHOUT THE STATE OF ARIZONA.

DOCKET NO. SW-20445A-09-0077

17 IN THE MATTER OF THE APPLICATION OF
18 VALENCIA WATER COMPANY - GREATER
19 BUCKEYE DIVISION FOR THE
20 ESTABLISHMENT OF JUST AND
21 REASONABLE RATES AND CHARGES FOR
22 UTILITY SERVICE DESIGNED TO REALIZE
23 A REASONABLE RATE OF RETURN ON
24 THE FAIR VALUE OF ITS PROPERTY
25 THROUGHOUT THE STATE OF ARIZONA.

DOCKET NO. W-02451A-09-0078

26 IN THE MATTER OF THE APPLICATION OF
27 WILLOW VALLEY WTER COMPANY FOR
28 THE ESTABLISHMENT OF JUST AND
REASONABLE RATES AND CHARGES FOR
UTILITY SERVICE DESIGNED TO REALIZE
A REASONABLE RATE OF RETURN ON
THE FAIR VALUE OF ITS PROPERTY
THROUGHOUT THE STATE OF ARIZONA.

DOCKET NO. W-01732A-09-0079

IN THE MATTER OF THE APPLICATION OF
GLOBAL WATER - SANTA CRUZ WATER
COMPANY FOR THE ESTABLISHMENT OF
JUST AND REASONABLE RATES AND
CHARGES FOR UTILITY SERVICE
DESIGNED TO REALIZE A REASONABLE
RATE OF RETURN ON THE FAIR VALUE
OF ITS PROPERTY THROUGHOUT THE
STATE OF ARIZONA.

DOCKET NO. W-20446A-09-0080

Arizona Corporation Commission

DOCKETED

OCT 26 2009

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1 IN THE MATTER OF THE APPLICATION OF
2 WATER UTILITY OF GREATER TONOPAH
3 FOR THE ESTABLISHMENT OF JUST AND
4 REASONABLE RATES AND CHARGES FOR
5 UTILITY SERVICE DESIGNED TO REALIZE
6 A REASONABLE RATE OF RETURN ON
7 THE FAIR VALUE OF ITS PROPERTY
8 THROUGHOUT THE STATE OF ARIZONA.

DOCKET NO. W-02450A-09-0081

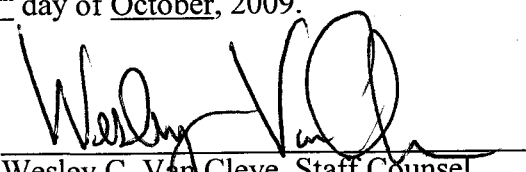
6 IN THE MATTER OF THE APPLICATION OF
7 VALENCIA WATER COMPANY – TOWN
8 DIVISION FOR THE ESTABLISHMENT OF
9 JUST AND REASONABLE RATES AND
10 CHARGES FOR UTILITY SERVICE
11 DESIGNED TO REALIZE A REASONABLE
12 RATE OF RETURN ON THE FAIR VALUE
13 OF ITS PROPERTY THROUGHOUT THE
14 STATE OF ARIZONA.

DOCKET NO. W-01212A-09-0082

**STAFF'S NOTICE OF FILING DIRECT
TESTIMONY**

12 Staff of the Arizona Corporation Commission ("Staff") hereby files the Direct Testimony of
13 Staff Witnesses Linda A. Jaress, Crystal S. Brown and Jian W. Liu in the above-referenced matter.

14 RESPECTFULLY SUBMITTED this 26th day of October, 2009.

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BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES

Chairman

GARY PIERCE

Commissioner

PAUL NEWMAN

Commissioner

SANDRA D. KENNEDY

Commissioner

BOB STUMP

Commissioner

IN THE MATTER OF THE APPLICATION OF)
GLOBAL WATER-PALO VERDE UTILITIES)
COMPANY FOR THE ESTABLISHMENT OF)
JUST AND REASONABLE RATES AND)
CHARGES FOR UTILITY SERVICE DESIGNED)
TO REALIZE A REASONABLE RATE OF)
RETURN ON THE FAIR VALUE OF ITS)
PROPERTY THROUGHOUT THE STATE OF)
ARIZONA)

DOCKET NO. SW-20445A-09-0077

IN THE MATTER OF THE APPLICATION OF)
VALENCIA WATER COMPANY-GREATER)
BUCKEYE DIVISION FOR THE)
ESTABLISHMENT OF JUST AND)
REASONABLE RATES AND CHARGES FOR)
UTILITY SERVICE DESIGNED TO REALIZE)
A REASONABLE RATE OF RETURN ON)
THE FAIR VALUE OF ITS PROPERTY)
THROUGHOUT THE STATE OF ARIZONA)

DOCKET NO. W-02451A-09-0078

IN THE MATTER OF THE APPLICATION OF)
WILLOW VALLEY WATER COMPANY FOR)
THE ESTABLISHMENT OF JUST AND)
REASONABLE RATES AND CHARGES FOR)
UTILITY SERVICE DESIGNED TO REALIZE A)
REASONABLE RATE OF RETURN ON THE)
FAIR VALUE OF ITS PROPERTY)
THROUGHOUT THE STATE OF ARIZONA)

DOCKET NO. W-01732A-09-0079

IN THE MATTER OF THE APPLICATION OF)
GLOBAL WATER-SANTA CRUZ WATER)
COMPANY FOR THE ESTABLISHMENT OF)
JUST AND REASONABLE RATES AND)
CHARGES FOR UTILITY SERVICE DESIGNED)
TO REALIZE A REASONABLE RATE OF)
RETURN ON THE FAIR VALUE OF ITS)
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ARIZONA)

DOCKET NO. W-20446A-09-0080

IN THE MATTER OF THE APPLICATION OF)
WATER UTILITY OF GREATER TONOPAH)
FOR THE ESTABLISHMENT OF JUST AND)
REASONABLE RATES AND CHARGES FOR)
UTILITY SERVICE DESIGNED TO REALIZE A)
REASONABLE RATE OF RETURN ON THE)
FAIR VALUE OF ITS PROPERTY)
THROUGHOUT THE STATE OF ARIZONA)

DOCKET NO. W-02450A-09-0081

IN THE MATTER OF THE APPLICATION OF)
VALENCIA WATER COMPANY-TOWN)
DIVISION FOR THE ESTABLISHMENT OF)
JUST AND REASONABLE RATES AND)
CHARGES FOR UTILITY SERVICE DESIGNED)
TO REALIZE A REASONABLE RATE OF)
RETURN ON THE FAIR VALUE OF ITS)
PROPERTY THROUGHOUT THE STATE OF)
ARIZONA)

DOCKET NO. W-01212A-09-0082

DIRECT

TESTIMONY

OF

LINDA A. JARESS

EXECUTIVE CONSULTANT

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

OCTOBER 26, 2009

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**EXECUTIVE SUMMARY
GLOBAL WATER-PALO VERDE UTILITIES
COMPANY, ET AL.
DOCKET NOS. SW-20445A-09-0077, ET AL**

The testimony of Linda Jaress addresses the following issues:

- Infrastructure Coordination and Financing Agreement fees
- Memoranda of Understanding and Franchise-Like Fee Pass-Through
- Pass-through of Central Arizona Groundwater Replenishment District fees
- Capital Structure
- Cost of Debt and Equity
- Distributed Renewable Energy Tariff

Staff recommends that the fees from the Infrastructure Coordination and Financing Agreements be accounted for as Contributions-in-aid-of-Construction for ratemaking purposes. However, the reduction to the rate bases of the Global Utilities should be reduced by the amount of plant the Global Utilities have voluntarily removed from rate base as excess capacity.

Staff recommends the Global Utilities' request for a franchise-like fee pass-through be denied. Some of the cities' franchise-like fees are charged to Global for serving areas outside of the city limits, the franchise-like fees have not been approved by the voters, are not actual franchise fees but are License Agreements, and the franchise-like fees change based upon certain Commission actions. The current Global Utilities' tariff addresses typical franchise fees, so a new tariff is not needed.

Staff recommends a 10 percent return on common equity for the Global Utilities and accepts the Global Utilities' recommendations for the cost of debt. Staff also recommends approval of the Global Utilities' requested capital structure's for Palo Verde of 45.3 percent debt and 54.7 percent equity and for Santa Cruz, 43.9 percent debt and 56.1 percent equity. Staff also recommends that hypothetical capital structures of 40.0 percent debt and 60.0 percent equity be adopted for Willow Valley and Valencia-Town. For Valencia-Buckeye, Staff recommends a capital structure of 54.9 percent debt and 45.1 percent equity.

The resulting recommended rates of return are: Palo Verde, 8.3 percent; Santa Cruz, 8.5 percent, Willow Valley, 8.2 percent, Valencia-Town, 8.7 percent and Valencia-Buckeye, 8.1 percent. Staff recommends that for WUGT, the Commission determine revenue requirement by application of an operating margin because after adjusting for ICFAs, WUGT has negative rate base. Furthermore, if the Commission determines that consolidation of the three West Valley companies is in the public interest, Staff also recommends that their combined revenue requirement be determined by operating margin.

Regarding the requested pass-through of the Central Arizona Groundwater Replenishment District fees, Staff recommends denial. Currently, none of the Global Utilities are charged the CAGRDR fees and it is unknown when they will need to be paid. Also, it is unknown how much the fees will be, or if or when the Global Utilities actually pay the fees. However, if the Commission determines that it is in the public interest to put a mechanism in place to recover future CAGRDR fees,

Staff recommends the fees be collected under an adjustment mechanism similar to that recommended by Staff in the Johnson Utilities case (Docket No. WS-02987A-08-0180).

Staff also recommends denial of the distributed renewable energy recovery tariff requested by the Global Utilities. A portion of the Arizona Public Service Company bill paid by the customers of the Global Utilities includes amounts charged pursuant to the REST rules for distributed energy. A portion of the ED3 bill paid by Global Utilities Customers may soon include charges similar to the REST Rule Tariff. With federal and state tax breaks and rebates from APS and ED3, along with amounts paid to APS and ED3 by customers in the Global's Utilities service territories, most, if not all of the costs of the distributed energy projects will have been paid for by the customers.

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Linda A. Jaress. I am an Executive Consultant III in the Utilities Division of the Arizona Corporation Commission ("ACC" or "Commission"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Please state your educational background and professional experience.

A. I received a Bachelor of Arts Degree from Michigan State University and a Master of Business Administration Degree from the University of Hawaii. I was employed as a Research Analyst for the Hawaii Trucking Association from 1977 through 1978 and as a Financial Analyst for the State of Hawaii, Division of Consumer Advocacy from 1980 through 1985. In 1985, I was employed by the Arizona Corporation Commission ("Commission") as a Senior Rate Analyst and received a promotion to Manager, Financial Analysis in 1991. I also served as the Acting Chief of the Accounting and Rates Section for a total of 12 months during 1997 and 2000. On January 1, 2001, I was promoted to the position of Executive Consultant III.

Q. Please list your duties and responsibilities as Executive Consultant III.

A. I complete special projects and other cases as assigned by the Director's Office.

Q. How is your testimony organized?

A. My testimony will present the Utilities Division Staff's ("Staff") conclusions and recommendations regarding the following issues in this order:

- Infrastructure Coordination and Financing Agreement fees
- Memoranda of Understanding and Franchise-Like Fee Pass-Through
- Water Storage Credits and Central Arizona Groundwater Replenishment District
- Capital Structure
- Cost of Debt and Equity
- Distributed Renewable Energy Tariff

For clarity, I will refer to the following entities according to these abbreviated names:

Global Water Resources, LLC.....	Global Parent or Global
Global Water Management, LLC	Global Management
Global Water, Inc.....	Global, Inc.
Global Water-Santa Cruz Water Company	Santa Cruz
Global Water-Palo Verde Utilities Company	Palo Verde
Water Utility of Greater Tonopah.....	WUGT
Valencia Water Company – Greater Buckeye Division	Valencia-Buckeye
Valencia Water Company – Town Division.....	Valencia-Town
Willow Valley Water Company	Willow Valley
Valencia-Town, Valencia-Buckeye and WUGT	West Valley Utilities
Santa Cruz, Palo Verde, WUGT, Valencia-Town, Valencia-Buckeye and Willow Valley.....	Global Utilities or Utilities
West Maricopa Combine	WMC

Q. Please describe Global Water Resources, LLC.

A. The Global Parent is a limited liability company which owns several Arizona public utility subsidiaries. The LLC members of the Global Parent are also the members of Global Management. According to the Utilities' witness Barber, Global Water, Inc., a direct subsidiary of the Global Parent, "provides the operational and administrative staff for the day-to-day activities of the Global Utilities" while Global Management provides "growth-related services to the Global Utilities." The Utilities have no employees of their own.

The revenues of the consolidated Global Parent include the revenue of the Utilities, revenue from the sales of water storage credits and revenues from the provision of billing services to unrelated utilities. The Global Parent also receives revenues from fees

1 collected under Infrastructure Coordination and Financing Agreements ("ICFAs") which it
2 enters with developers and landowners.

3
4 **Q. Describe the financial health of the Global Parent.**

5 A. According to the Global Parent's Securities and Exchange Commission Form A, for the
6 six months ending June 30, 2008, the Global Parent's consolidated capital structure was
7 comprised of \$6.5 million of members' equity and \$145.3 million of debt (not including
8 acquisition debt of \$39.1 million), or 4.3 percent equity and 95.7 percent debt. This is a
9 decline in the strength of Global's capital structure from just six months earlier on
10 December 31, 2007, when Global's capital structure was 11.2 percent equity and 88.8
11 percent debt. Since then, at June 30, 2009, the capital structure has declined further to 2
12 percent equity and 98 percent debt.

13
14 Also, the consolidated Global Parent's net income remains negative. For the first six
15 months of 2007, Global earned \$6.5 million. For the same six months of 2008, Global
16 suffered a loss of \$2.8 million and reported a net loss of \$2.6 million for the 6 months
17 ending June 30, 2009. On the same date, Global's balance of cash and cash equivalents
18 was \$8,139.

19
20 **Q. Does the Global Parent provide financing for its utility subsidiaries?**

21 A. Yes. Other than advances and contributions from landowners and developers and loans
22 from the Water Infrastructure Financing Authority ("WIFA"), the Utilities acquire all
23 external financing from the Global Parent. The Global Parent has access to the financial
24 markets and issues bonds and bank debt. It has recently received Commission approval in
25 Decision No. 70980 dated May 5, 2009, to restructure into a corporation and initiate an
26 initial public offering of common stock. However, until the Global Parent issues common
27 stock, it could increase its equity by accepting additional membership capital.

1 **ICFAS**

2 **Q. Please describe the ICFAs entered by the Global Parent.**

3 A. ICFAs are contracts between the Global Parent and developers or landowners, under
4 which the Global Parent "coordinates" the following services:

- 5
- 6 • Coordination of construction services for water and wastewater treatment facilities.
- 7
- 8 • Financing for the provision of infrastructure in advance of, and with no guarantee of
- 9 customer connections.
- 10
- 11 • Arranging and coordinating the provision of utility services to the property.
- 12
- 13 • Obtaining "will serve" letters for the provision of utility services to the property.
- 14
- 15 • Including the landowner's property in an expanded CC&N.
- 16
- 17 • Obtaining all necessary regulatory permits and approvals (Assured Water Supply,
- 18 Aquifer Protection Permit, etc.)
- 19
- 20 • Executing line and main extension agreements with developers.
- 21
- 22 • Developing master utility plans.
- 23

24 **Q. Are these services that utilities generally provide?**

25 A. Utilities generally provide most of the services mentioned such as obtaining a will-serve
26 letter, executing line and main extension agreements, developing master water and sewer
27 utility plans, including land in the utilities' certificated area and coordination of
28 construction of utility facilities.

29

30 Within the ICFA contracts, Global Parent describes itself as "the Coordinator" which is
31 engaged in the business of "(i) developing master utility plans for services including
32 natural gas, electricity, cable television, internet, intranet, and telecommunications; (ii)
33 providing construction services for water and wastewater treatment facilities, and (iii)
34 providing financing for the provision of infrastructure **in advance of and with no**
35 **guarantee of customer connections** (emphasis added)."

1 **Q. Has Global Parent ever developed master plans for natural gas, electricity, cable**
2 **television, Internet, intranet or telecommunications?**

3 A. No. In response to Staff data request LJ 9.1 which asked a similar question, Global
4 replied, "To date, Global has not been requested to facilitate such plans..." Therefore, the
5 ICFA contracts have only been used to supply and coordinate water and sewer utility
6 services.

7
8 **Q. What is the amount of ICFA fees Global has collected?**

9 A. According to Mr. Hill's direct testimony, page 32, lines 10-15, the Global Parent collected
10 ICFA fees of;

11
12 \$4,998,566 in 2004
13 \$20,543,310 in 2005
14 \$25,939,677 in 2006
15 \$4,656,470 in 2007
16 \$3,946,100 in 2008
17 \$0 expected in 2009
18 Total = \$60,084,123
19

20 **Q. What is the total combined, requested rate base of the Global Utilities?**

21 A. The total requested rate base proposed by the Global Utilities is \$118,700,000. Thus total
22 ICFA fees collected equal about half of the Utilities rate base.
23

24 **Q. How many ICFAs has Global executed?**

25 A. Exhibit 10 of the direct testimony of Mr. Trevor Hill shows that Global has entered 157
26 ICFAs. The vast majority of the ICFAs were entered in 2005 and 2006.
27

28 **Q. Do the ICFAs apply to development within Global's CC&N areas?**

29 A. Generally, the ICFAs are entered before Global applies for the CC&N extension to serve
30 the area covered by the development which is the subject of the ICFA contract.

1 **Q. What do the ICFA fees pay for?**

2 A. According to Global, in addition to the services listed on page 3 of this testimony, the uses
3 of the ICFA fees are many, but do not include paying for utility plant. In a response to
4 Staff Data request LJ-1.1 (a)(1), Global contends:

5
6 The fees are meant to pay for services provided and to
7 partially offset the carrying cost of capital of GWR's
8 [Global Parent] investment in these facilities. In simple
9 terms, the ICFA is a financing agreement that allows the
10 developer to defer the bulk of their fees closer to the time
11 the land will be developed....They are not meant to recover
12 the costs of infrastructure installed.

13
14 The same data response indicates that under the ICFAs, "GWR agrees to provide services
15 to plan, coordinate and finance the water and wastewater infrastructure that would
16 otherwise be required to be performed or subcontracted by the developer."

17 According to the Direct Testimony of Global witness Matt Rowell, Page 7, lines 19
18 through 22, he believes the purpose of the ICFA fees is "to partially offset the carrying
19 costs of investing in growing service areas. They have also been used to pay (some or all)
20 of the purchase price of utilities."

21
22 A Global Utilities' data response, Schedule LJ-1.1(a)2, states, "Under our ICFAs we have
23 a contractual obligation to provide physical capacity for water and wastewater to the
24 landowner/developer."

25
26 Finally, in a response to data request LJ-3.10, Global indicates that "ICFAs are a tool to
27 achieve specific objectives: a. Consolidation; b. Conservation; and, c. Financing of
28 regional-scale infrastructure."

1 **Q. When do the developers or landowners pay for the services received under the**
2 **ICFAs?**

3 A. A nominal, initial fee is paid to Global by the developer at signing of the ICFA after
4 which there are other payments due when specific milestones are reached, one of which is
5 when the lines have been extended "with planned sufficient capacity to serve the Land and
6 meet its intended use." When the developer receives final plat approval, the bulk of the
7 ICFA fees are due. The fees are charged on a per residential unit basis, similar to a hook-
8 up fee.

9
10 **Q. How are the fees calculated?**

11 A. An explanation of the calculation of the fees charged under ICFAs is found on Page 6 of
12 the Direct Testimony of Cindy Liles in Docket No. W-01445A-06-0200, et al (the
13 complaint case), August 3, 2007:

14
15 ICFA fees are not 'calculated' by a simple formula because
16 it is not straight-line math. There are several criteria that
17 are each independently assessed and for each, a cost
18 estimate is developed. The criteria include:

- 19
20 • Existing infrastructure
- 21
22 • Assessment of scope of needed planning and infrastructure
- 23 under ICFA;
- 24
25 • Time to construct that infrastructure;
- 26
27 • Construction costs;
- 28
29 • Phasing including timeline to 'build out' which drives
- 30 unused/unuseful risk at ACC;
- 31
32 • Current cost of capital relative to market conditions for
- 33 capital.
- 34

1 **Q. Do these factors translate into a formula used by Global to arrive at the ICFA fees?**

2 A. No. Ms. Liles also responded to a Staff data request in the same docket dated October 30,
3 2007:

4
5 Many of the factors that influence pricing of ICFAs are
6 matters of judgment. In addition, the prices are negotiated.
7 Thus, there is no overall "calculation" or "model" that
8 mechanically determines the pricing of the ICFA.
9

10 **Q. Even though there is no formula for calculating ICFA fees, approximately how much**
11 **are they?**

12 A. The ICFA fees are generally paid according to an Equivalent Dwelling Unit ("EDU")
13 basis, usually 3.5 EDU per acre. Staff has reviewed some of the ICFA contracts. Many of
14 the contracts set fees at \$3,600 per EDU (plus an inflation factor), although the fees range
15 from \$2,300 to \$4,000 per EDU depending on the year the ICFA was entered and on the
16 particular development. Thus, developers are not treated in a uniform manner by the
17 Global Parent, whereas developers receive uniform treatment under main extension
18 agreements and hook-up fee tariffs approved by the Commission. To Staff's knowledge,
19 no developer in the Global Utilities' service territories has complained to the Commission
20 regarding unequal treatment.
21

22 **Q. How does the Global parent account for the ICFA fees?**

23 A. Because the ICFAs are entered by the Global Parent, and are ostensibly for services
24 performed by the Global Parent, the fees are accounted for only on the parent's books (not
25 on the books of the Global Utilities) as Deferred Revenue (a liability) until such time as
26 "capacity is met," at which time the fees are converted to Operating Revenue.

1 **Q. Although the ICFA fees are paid to the Global parent, could the ICFA fees ultimately**
2 **reach the Global Utilities?**

3 A. Yes. Only a portion of the ICFA fee “revenue” is offset by expenses. This results in
4 Global Parent net income, which if not paid out to Global Parent’s LLC members as
5 distributions, becomes equity to the Global Parent. Distributions to LLC members are
6 similar to dividends to shareholders of corporations. Both distributions and dividends are
7 taxable. According to Global, in Cindy Liles’ Direct testimony, page 8, lines 4 and 5,
8 “[T]he ICFA model allows Global Parent to infuse significant equity into its utility
9 subsidiaries....” Thus, the net income generated by the ICFA fees is available to be
10 invested by Global into its utilities as equity.

11
12 **Q. Can the \$60.1 million in ICFA fees collected from 2004 through 2008 be tracked to**
13 **specific uses in specific Global Utilities?**

14 A. No. First, according to the Utilities’ response to Staff Data Request LJ-1.4, “ICFA funds,
15 once received, are not kept separate from other funds available to Global parent.”

16
17 Second, Global’s business model of building regionally can make such tracking of fees
18 difficult, if not impossible. For example, a Global Utility could already have enough
19 capacity to serve an additional developer when that developer pays the fees. Then, the
20 ICFA fees paid by the developer could be used for purposes other than providing services
21 to the developer. As mentioned in the Utilities’ testimony, the fees paid by a developer
22 could be used to purchase other public utilities.

1 Since 2004, during the period after Global acquired Palo Verde and Santa Cruz, the
2 Global Parent made distributions to its members totaling \$44.2 million¹ and has made
3 payments toward the purchase of additional utilities in amounts exceeding \$43.0 million.
4 Some of the ICFA fees could have been used for those purposes.

5
6 Finally, and most importantly, because the fees are accounted for by the Global parent as
7 revenue and not separately tracked (i.e., comingled) by the Global Parent, it is reasonable
8 to conclude that some or all of the fees were invested in the Utilities to pay for plant.

9
10 **Q. Could the ICFA fees contribute to Global's efforts to plan and build regionally?**

11 A. Yes. The Global Parent's equity resulting from the fees could have been invested in the
12 Global Utilities for existing plant as well as plant planned and installed to meet growth
13 well into the future. With the collection of ICFA fees, the Global Parent is not dependent
14 on Commission rate decisions to receive a return of, or a return on, an investment in the
15 Global Utilities regional plant installed to serve current customers along with regional
16 growth.

17
18 **Q. How can the Global Parent use the ICFA fees to its advantage?**

19 A. The ICFA fees are essentially cost-free capital to the Global Parent which it can leverage
20 by investing the funds as equity in the Global Utilities. For example, the Global Parent
21 could invest \$10.0 million of the cost-free ICFA fees into a Global Utility as equity, and
22 subsequently receive a 10 percent authorized return on equity in a Global Utility rate case,
23 in which case the Global Parent would receive a return of \$1,000,000 on capital upon
24 which there is no interest, dividend or principal repayment requirements. This would

¹ Distributions to LLC members are similar to dividends to shareholders of corporations. Both distribute net income to investors and both are taxable to the investor. According to Global, these are tax distributions to cover tax liabilities, rather than ordinary dividend-like distributions and were "required" to compensate the members for the income tax liability associated with earnings of the LLC. However, Staff is unaware of such a requirement. Limited liability companies have the ability to retain earnings rather than distribute.

1 result in higher rates to utility customers than if the ICFA fees had been paid directly to
2 the Global Utilities as contributions-in-aid-of-construction which reduce rate base.

3
4 **Q. Has Staff previously gone on the record as to what Staff's recommendation would be**
5 **regarding the rate case treatment of the ICFA fees?**

6 A. Yes. In a Staff Report filed on October 10, 2006, in generic Docket No. W-00000C-06-
7 0149, Staff indicated it would recommend that costs paid by ICFA fees be treated as
8 CIAC or AIAC in a rate case.

9
10 **Q. What rate case treatment does Global propose for the ICFA fees?**

11 A. According to Page 17, lines 10 through 12, of Matt Rowell's direct testimony, "The fees
12 collected through ICFAs should not be a factor in determining rates for the Global
13 Utilities."

14
15 **Q. It is Staff's conclusion that the Global Parent could issue debt and collect ICFA**
16 **funds if it were not the parent of the Global Utilities?**

17 A. No. It is doubtful that banks or the bond market would provide Global Parent financing
18 without the support of the revenues and assets of its utility subsidiaries. Landowners and
19 developers would have no reason to pay ICFA fees to the Global Parent if they did not
20 require service from the Utilities.

21
22 **Q. What are Staff's conclusions and recommendations regarding the ICFAs?**

23 A. The ICFA contracts would not be executed absent the Global Parent/Global Utilities
24 relationship. Other than contributions and advances and WIFA debt, the Utilities derive
25 all their external financing from the parent through the parent's investment of equity. This
26 equity investment was derived from the parent's net income, which was largely derived
27 from ICFA fee revenues.

1 Furthermore, Global Parent has claimed so many uses of the ICFA fees that the exclusion
2 of the ICFA fees as a source of utility plant financing seems purposeful. It is not
3 reasonable to assume that the Global Parent could collect ICFA fees absent its relationship
4 with its utilities. The fees are only collected in instances whereby a developer or
5 landowner needs plant for utility service. Therefore, Staff views the ICFA fees as an
6 integral part of Utilities' financing of plant used to supply utility service.

7
8 **Q. What other factor supports Staff's adjustment to rate base for ICFA fees?**

9 A. It appears that the Global Parent enters ICFA contracts in place of the Utilities accepting
10 contributions. According to the 2008 Annual Report to the Commission, Palo Verde, with
11 net plant of \$108.6 million, had a balance of zero contributions. At the same time, Palo
12 Verde listed 500,000 feet of 8 and 10-inch mains. These sizes of mains are normally paid
13 for by developers with contributions. Santa Cruz, with \$105.2 million in net plant also
14 had a balance of zero contributions. Santa Cruz lists 81,000 feet of 8-inch mains, also
15 plant generally paid for by contributions.

16
17 Most Arizona water and sewer utilities have significant amounts of CIAC on their books.
18 Palo Verde and Santa Cruz, along with the other Utilities, are the exceptions to the rule.
19 The Global Parent has accepted almost \$60 million in ICFA fees from developers while, at
20 the same time, the Global Utilities have constructed plant normally paid for by developers.
21 This further supports Staff's treatment of ICFA fees as CIAC in the calculation of rate
22 base.

23
24 For the above reasons, Staff concludes that the fees generated through the ICFAs should
25 be treated as contributions to the Global Utilities and removed from rate base.

1 **Q. Why is it important that such adjustments be made?**

2 A. It is important because utility customers should pay for the cost of their service and no
3 more. Customers should not be required to pay a return on plant which was built with
4 cost-free capital. Staff concludes that ICFA fee revenues that are invested as equity in
5 Global Utilities is cost-free capital and that this cost-free capital was used to pay for the
6 Utilities' plant.

7
8 Also, treating ICFA fees as contributions is essential to protect ratepayers from a rush by
9 other public utility holding companies to contrive similar transactions that serve to
10 circumvent the Commission's ability to regulate the earnings of utilities under its
11 jurisdiction by recognizing cost-free capital as equity. It is doubtful that the ratepayers of
12 Arizona Public Service Company ("APS") would benefit by Pinnacle West Capital
13 Corporation executing similar arrangements with developers and infusing the collections
14 in APS as equity. The ICFA or ICFA-like contracts further blur the line between the
15 holding company and the utility; a line which is already blurred by the use of a common
16 management company and common officers and directors.

17
18 Finally, when the Global Parent accepts ICFA fees from developers and uses the proceeds
19 to make equity investments in the Global Utilities to pay for plant to serve those
20 developers, it is essentially transferring the risk that the development will be unsuccessful
21 to the ratepayers. By adjusting rate base for imputed ICFA fees, the ratepayers are
22 protected from the financial impact of plant installed for the developers but not used.

23
24 **Q. What amounts should be deducted from rate base?**

25 A. Staff recommends that \$10,991,128 be deducted from Palo Verde's rate base, \$6,600,076
26 be deducted from Santa Cruz' rate base and \$9,022,750 be deducted from the combined
27 rate bases of WUGT, Valencia-Town and Valencia-Buckeye. If the Commission does not

consolidate, or WUGT is excluded from consolidation, Staff recommends \$9,022,750 be deducted from the rate base of WUGT.

Q. How did Staff arrive at the appropriate adjustments to reflect ICFA fees?

A. Exhibit LJ-1 shows Staff's calculation of the rate base adjustment related to the ICFA funds.

First, Staff determined which ICFA contracts were entered by landowners and developers in the West Valley (\$9.5 million) and which ICFA contracts were entered by landowners and developers in the Maricopa area (\$50.0 million) using information provided by the Global Utilities in response to LJ-3.10a. However, the information for the Maricopa area is not segregated by water or wastewater service, so Staff allocated the proceeds of the Maricopa area ICFAs to Palo Verde and Santa Cruz based on test year plant amounts (Schedule E-1 of the applications).

Staff then reduced the resulting allocated ICFA fees by the voluntary rate base reduction the Utilities made based upon excess capacity resulting in a \$10,991,128 reduction to Palo Verde's rate base and a \$6,600,076 reduction to Santa Cruz' rate base. For the purposes of this adjustment, Staff assumed that ICFA fees were used to pay for this excess capacity.

Q. How did Staff calculate the reduction to the rate base of the West Valley companies?

A. Some of the West Valley ICFAs applied only to WUGT. Two of the contracts involved both the Hassayampa Utility Company ("HUC") and WUGT. HUC is a Global wastewater utility which is not part of this rate case. To avoid reducing rate base for ICFA funds which might have been applied to a utility outside of the rate case, Staff allocated the proceeds of the two contracts between WUGT and HUC based on total plant.

1 Staff used end of test year plant for WUGT and December 31, 2008, net plant for HUC.
2 This resulted in a \$9,022,750 reduction in rate base for WUGT.

3
4 **Q. What did the Global Utilities propose as rate base for WUGT and for the**
5 **consolidated West Valley?**

6 A For WUGT, the Utilities requested a rate base of \$2,598,259 and a consolidated rate base
7 of \$7,767,334 for the three West Valley utilities.

8
9 **Q. Does Staff's ICFA adjustment exceed the proposed rate bases of the West Valley**
10 **utilities combined?**

11 A. Yes, it does. If the Commission adopts the Utilities' consolidation recommendation, the
12 West Valley companies would have a negative rate base resulting in a negative, rate base
13 for which no meaningful rate of return can be calculated. Therefore, Staff is
14 recommending that under the special circumstances of this case, the Commission
15 determine the operations income and revenue requirement of the West Valley utilities
16 using our operating margin.

17
18 **MEMORANDA OF UNDERSTANDING AND FRANCHISE TAX FLOW-THROUGH**

19 **Q. What agreements has the Global Parent entered with municipalities and tribal**
20 **authorities?**

21 A. The Global Parent entered a Memorandum of Understanding ("MOU") with the City of
22 Maricopa, dated December 6, 2005, an MOU with the City of Casa Grande dated
23 December 19, 2005, a Letter of Understanding with the Ak-Chin Indian Community,
24 dated May 23, 2006, an MOU with the Town of Buckeye, dated October 7, 2007, and an
25 MOU with the City of Eloy dated August 25, 2008. Copies of the MOUs are included in
26 Trevor Hill's direct testimony in this case as Hill Exhibits 8 and 9.

1 **Q. Please describe the MOU with the City of Maricopa.**

2 A. Some of the notable sections of the MOU between Global and Maricopa ("the City") are :

- 3
- 4 1. The City will support Global's acquisition of Sonoran Utilities Services assets and
- 5 Global's CC&N application for the 387 District area.
- 6
- 7 2. Global will provide the City with annual reports of revenues, customers, facilities
- 8 completed and planned projects.
- 9
- 10 3. Before filing a rate case, Global will submit the proposed rates to the Mayor and
- 11 City Council for "review and comment" by the Mayor and the Council and public
- 12 hearing.
- 13
- 14 4. The parties will enter an "operating/license agreement" (which the City will
- 15 endeavor to replace with a franchise agreement) wherein the following fees will
- 16 apply to Global's activities within the City's incorporated limits, to Global's
- 17 planning area and to four areas which have annexation petitions pending:
- 18
- 19 • Palo Verde and Santa Cruz will pay a fee of 3% of gross revenues generated by
- 20 water and wastewater customers within the City limits and 3% of gross revenues
- 21 generated by water and wastewater customers located outside the City limits but
- 22 within Global's Planning Area. If a Commission order approving the fees has
- 23 not been entered by April 14, 2006, then for the customers located outside the
- 24 City limits but within Global's Planning area, the fee will be reduced to 2%.
- 25 With respect to fees based on revenues from customers inside the City limits, the
- 26 fee remains 3%. When property located outside the City limits are included in
- 27 the City limits through annexation, the 2% fee increases to 3%.
- 28
- 29 • In the event the Commission does not issue an order approving the franchise-like
- 30 fee, the City will proceed with a franchise election to occur no later than the
- 31 **earlier** of 18 months following the denial by the Commission or October 15,
- 32 2007. (To Staff's knowledge, this election has not been held.)
- 33
- 34 • If the ACC does not approve these fees to be added to the monthly consumptive
- 35 billings of the Utilities, Global shall pay the fees as an operating expense.
- 36
- 37 • Global pays to the City a "voluntary" hook-up fee of \$50 for each residential
- 38 home connecting to Santa Cruz' and Palo Verde's water and wastewater system
- 39 within the jurisdictional limits of the City, as amended from time to time. The
- 40 fee will be \$100 for areas within Global's planning area but outside of the City
- 41 limits.
- 42
- 43 5. The City and Global commit to jointly fund the financial structures required to
- 44 access Industrial Development bonds.
- 45

- 1 6. Global agrees to maintain an office at the City Hall for customer service or at
2 Global's Maricopa headquarters.
- 3
- 4 7. Global agrees to prepare an annual "Plan for Growth" for the City's Maricopa
5 planning area and submit the report to the Mayor and City Council.
- 6
- 7 8. The parties will explore joint efforts to support economic development and to co-
8 fund economic development initiatives.
- 9
- 10 9. Global will assist the City with its GIS system including data sharing, data
11 integration, and cost sharing. Global and the City will integrate SCADA systems,
12 CCD Security Data, Rapid Response Plans, broadband wireless network sharing, etc.
13 and will explore collaborative billing services.
- 14
- 15 10. Global shall support the annexation efforts of the City.
- 16
- 17 11. The City will "endeavor" to streamline and expedite Global's permitting
18 submissions and will support Global's efforts to obtain CAAG 208, CC&Ns, ADEQ,
19 ADWR and other regulatory approvals for the areas at issue.
- 20
- 21 12. Global will have the option of reimbursing the City for costs incurred to expedite the
22 review of Global's permits and plans.

23

24 **Q. Since the MOU with Maricopa was signed, have Maricopa and Global Parent signed**
25 **the operating/license agreement required by the MOU?**

26 A. On November 9, 2006, Palo Verde and Santa Cruz signed a License Agreement with
27 Maricopa. The License Agreement is similar to a franchise agreement in that it covers the
28 utilities' use of public rights-of-way, the construction standards with respect to
29 improvements in the public rights of way, the restoration of any surface or subsurface, the
30 relocation of any of the utilities' facilities, etc. The License Agreement includes the fees
31 and hook-up fees mentioned in the MOU.

32

33 **Q. Is Staff aware of any other franchise agreement that includes fees charged per new**
34 **utility hook-up or fees charged outside the city or county boundaries?**

35 A. No.

1 **Q. What have the Global Utilities requested regarding franchise-like fees?**

2 A. The Global Utilities are requesting approval to flow through directly to their customers the
3 “franchise-like” fees paid by Santa Cruz and Palo Verde to the Cities of Casa Grande and
4 Maricopa agreed to under the MOUs. The franchise-like fees are paid based upon an
5 operating/license agreement entered by Santa Cruz and Palo Verde with Maricopa
6 pursuant to the MOU. According to Page 25, lines 19 through 24 of the direct testimony
7 of Jaime Moe,

8
9 This franchise-like fee is specifically linked to the “operating/license
10 agreement” that allows the Global Utilities to use the public right of way.
11 Because this franchise fee is based on gross revenues, it is like sales taxes,
12 and it is therefore appropriate for a pass-through mechanism. If the ACC
13 does not believe a pass-through mechanism is appropriate, then expenses
14 need to be increased for recovery.

15
16 **Q. Is the License Agreement a franchise agreement?**

17 A. Although it has many of the characteristics of a franchise agreement, the License
18 Agreement has not received voter approval consistent with other franchise agreements. In
19 a “normal” franchise agreement containing a franchise fee, the fee is a flat percent and
20 does not increase over the life of the franchise, which is usually 25 years. Normal
21 franchise agreements do not contain hook-up fees. The License Agreement between Santa
22 Cruz and Palo Verde and Maricopa includes fees of 3 percent which fall to 2 percent for
23 some customers and then rise to 3 percent under annexation. The License Agreement also
24 includes hook-up fees and has a life of 20 years, or until “replaced with a [real] franchise
25 agreement” (License Agreement, Section 2).

26
27 **Q. What concerns Staff about the Maricopa MOU and License Agreement?**

28 A. First, although the Utilities have not requested recovery of the hook-up fees, as opposed to
29 the gross revenue fees, in the MOU and License Agreement, the Global Parent is obligated

1 to pay these fees by both the MOU and the License agreement (although not cumulative).
2 Staff is concerned that due to the poor financial health of the Global Parent, there may be
3 significant pressure to extract cash from the Global Utilities to pay the hook-up fees. Staff
4 is concerned that during a time of financial stress, the Global Parent is using cash flow to
5 pay an unnecessary fee when its utility subsidiaries may need those funds.
6

7 Also, both the hook-up fee and the franchise-like fee apply not only to customers located
8 within Maricopa's city limits but also from areas outside of the city limits but within
9 Global's planning area. Staff does not believe there is a basis for the Commission to
10 approve a pass-through of Maricopa fees charged to Global Utilities that are based on
11 revenues generated outside of the Maricopa city limits. It is unfair for utility customers to
12 pay fees which go to municipalities by which they are not governed.
13

14 In addition, Global Utilities are requesting approval to pass through the License
15 Agreement fees in the same manner as a utility would pass through franchise fees that
16 have been approved by the City voters. Staff is reluctant to recommend franchise fee
17 treatment for fees that are not franchise fees. In general, to raise a franchise fee,
18 municipalities hold an election. For Maricopa to raise or lower the franchise-like fee with
19 Global Utilities, it only needs to negotiate a new fee. With a pass-through for this
20 negotiated fee, the Global Utilities might not be as motivated to negotiate aggressively for
21 fees that are in the best interest of utility customers.
22

23 Staff is also concerned that although Global specifically accounts for the fees it pays to
24 Maricopa, it does not account separately for the expenses it incurs in complying with the
25 MOU. In a data response to LJ-8.2, Global said that it "separately accounts for franchise
26 fees and other payments made pursuant to the MOU." Global further stated, "As part of
27 the interaction [under the MOU] there are activities which are completed by utility

1 personnel in the normal course of their operations that fulfill MOU obligations.” But the
2 Global Utilities “do not, however account separately for completion of those items and
3 briefings.” In other words, the Global Utilities account for the fees they pay under MOUs
4 but not for the expenses incurred by “utility personnel.” Staff notes that there are no
5 “utility personnel.”

6
7 Finally, the Global Parent and the Utilities have agreed to changes in the revenue-based
8 fee based on annexation and Commission approval. Staff asked the Global Utilities to
9 justify this unusual arrangement and in their response to LJ-8.17, the Utilities responded
10 as follows:

11
12 “The operating/franchise fee was set on the basis of the understanding that
13 once approval from the ACC was received, the fee would be 3%. In the
14 interim, the fee was set at 2%. The reason for this is that the fee at present
15 is paid by Global Parent. Global Parent does not have a revenue stream
16 from which to pay these fees, and as such a lower rate was negotiated.”

17
18 This demonstrates the municipalities desire and willingness to charge franchise fees on the
19 basis of ability to pay.

20
21 **Q. How do Santa Cruz and Palo Verde benefit from the payment of the franchise-like**
22 **fee?**

23 **A.** Staff data request STF-11.2 asked Global to provide the benefits derived from entering the
24 MOUs with Maricopa and Casa Grande. The response is attached as Exhibit LAJ-2. Staff
25 concludes that most, if not all of the “benefits” received by Palo Verde and Santa Cruz
26 would likely be received absent the agreement.

1 **Q. What amount of franchise-like fees did the Global Parent pay during the test year?**

2 A. The Global Parent paid \$322,352 in fees during the Test Year pursuant to a License
3 Agreement with the City of Maricopa. The Global Parent did not pay any fees to Casa
4 Grande during the Test Year.

5
6 **Q. What does Staff recommend regarding a pass-through for the franchise-like fee?**

7 A. Staff recommends the Commission deny the franchise-like fee pass-through. First, and
8 foremost, the fees are not franchise fees. Second, they apply to customers outside the City
9 limits. Finally, because the deadline set in the MOU for a franchise election has long
10 passed, Staff has no reason to believe a franchise agreement will be entered.

11
12 **Q. Would Staff object to the pass-through after Global enters a bona fide franchise**
13 **agreement which has been approved by the voters?**

14 A. No, Staff would not object. Palo Verde and Santa Cruz already have the typical language
15 in their tariffs allowing a pass through of certain taxes pursuant to A.A.C. R14-2-409.D.5.
16 This is the Rule under which the Commission generally allows the flow-through of
17 franchise fees. This rule allows that "each utility may collect from its customers a
18 proportionate share of any privilege, sales or use tax." Because this language is already in
19 the tariffs of Santa Cruz and Palo Verde, once they enter a franchise agreement voted on
20 by Maricopa's voters, Santa Cruz and Palo Verde could automatically pass the franchise
21 fees through to their customers. However, it is assumed that the franchise fee passed
22 through to the ratepayers will not include fees for areas outside of the Maricopa city
23 limits.

24
25 **Q. Is the MOU with Casa Grande similar to the MOU with Maricopa?**

26 A. Yes, but with a small difference. The MOU with Casa Grande includes a provision
27 whereby Global will either recharge for its own benefit, or make available to Casa Grande

1 for recharge, the water which cannot be beneficially used within the service area. The
2 “voluntary” connection fee and the “operating/license” fee Global pays is very similar.

3
4 **Q. Has either Global Parent or the Global Utilities paid a franchise-like fee to Casa**
5 **Grande?**

6 A. No. According to data responses, the Global Utilities have not begun service yet in Casa
7 Grande and did not make fee payments during the test year.

8
9 **Q. How is the MOU with the Town of Buckeye different from the MOU with the City of**
10 **Maricopa?**

11 A. The MOU with Buckeye primarily addresses the intentions of the parties to work
12 cooperatively on the management of the Lower Hassayampa Sub-basin. The Town agrees
13 to not oppose Global’s Hassayampa Utilities Company’s proposed Maricopa Association
14 of Government’s 208 Amendment. It does not appear that any money will change hands
15 based on the agreement nor would significant costs be incurred pursuant to the agreement.

16
17 **Q. Describe the MOU with Eloy.**

18 A. The MOU with Eloy requires an economic development fee of \$369,000 to be paid by
19 Global to Eloy to support Eloy’s economic development efforts. The economic
20 development fee is offset by the “franchise fee”. The hook-up fee of \$100 (\$50 for water
21 and \$50 for wastewater) is the same as in the other MOUs. The Eloy MOU also contains
22 a provision giving Global a “first and prior right to review and negotiate with the City
23 ...on future opportunities to expand the Subject Territory ...”

24
25 **Q. Is Global’s service territory near Eloy part of this rate case?**

26 A. No. The Eloy area is the location of two Global utility subsidiaries - Picacho Cove Water
27 Company and Picacho Cove Utilities.

1 **Q. Please describe the Letter of Understanding signed by Global and the Ak-Chin**
2 **Indian Community.**

3 A. The Letter of Understanding indicates that Global and Palo Verde are "willing to remove
4 the development of proposed new AzPDES discharge points upstream of the Ak-Chin
5 Community" in certain washes, including their tributaries and that there are associated
6 costs related to this redeployment. The Letter of Understanding with the Ak-Chin
7 Community did not require cash payments by Global or its utilities.

8
9 **Q. Does Staff have any particular recommendations regarding these other agreements?**

10 A. No. Staff is presenting this information to the Commission to illustrate how the Global
11 Parent interacts with other government entities.

12
13 **CAPITAL STRUCTURE AND RATE OF RETURN**

14 **Q. What capital structures, costs of debt, costs of equity and weighted cost of capital is**
15 **Staff recommending for the Global Utilities?**

16 A. Attached as Exhibit LAJ-3, are Staff's recommendations for the cost of capital and rate of
17 return for the Global Utilities. No capital structure or rate of return is shown for WUGT
18 because Staff calculated a negative rate base for that company. A negative rate base
19 indicates that capital provided by non-investors exceeds the net value of other rate base
20 components. The capital structure is not useful and a rate of return is not meaningful for
21 calculating the required operating income and revenue requirement of a utility with a
22 negative rate base. Therefore, for WUGT, Staff recommends that the Commission apply
23 an operating margin to determine the revenue requirement for the West Valley companies.

24
25 If the Commission decides to consolidate the three West Valley utilities for ratemaking
26 purposes, the revenue requirement for all three should be determined by operating margin.

1 **Q. Why is the capital structure of a utility important in the rate setting process?**

2 A. The capital structure is the relative proportion of each source of funds (i.e., debt and
3 equity) used to finance an entity's assets. Since each source has its own specific cost, the
4 cost of each source is weighted by its proportion of the total capital to determine the rate
5 of return to apply to the rate base.
6

7 **Q. What capital structures are the Global Utilities requesting?**

8 A. The Global Utilities are requesting 45 percent debt and 55 percent equity for Palo Verde,
9 and 44 percent debt and 56 percent equity for Santa Cruz. For the other Global Utilities,
10 Global proposes capital structures that vary by utility from 2 percent debt and 98 percent
11 equity to 17 percent debt and 83 percent equity. Exhibit LAJ-4 illustrates the capital
12 structures Global is requesting.
13

14 **Q. Why is it important to have a balanced capital structure?**

15 A. Unbalanced capital structures are inefficient. If there is a disproportionate amount of debt
16 in the capital structure, the risk of default increases and drives up the cost of both debt and
17 equity. On the other hand, equity rich capital structures will result in a higher weighted
18 cost of capital because, in general, equity is more expensive than debt. Equity is more
19 expensive than debt, first, because debt is senior to equity in a liquidation or a bankruptcy
20 so equity holders bear a higher risk of loosing their investment. Second, dividends to
21 equity holders are paid after interest on payments on debt, so their return is more volatile
22 than the income to the debt holders. Third, equity does not carry the same income tax
23 advantages as debt because dividends or membership distributions are not tax deductible
24 by the entity whereas interest payments on debt are tax deductible. Thus, an equity-rich
25 capital structure results in a higher tax bill to the entity than a more balanced capital
26 structure.

1 Furthermore, a capital structure with a high proportion of debt (highly leveraged) like the
2 Global Parent's capital structure, is an obstacle to the acquisition of additional capital.
3 Additional debt or equity issuances would be expensive due to the high risk of default on
4 debt obligations and due to the diminished capacity to pay dividends (member
5 distributions) on the equity.
6

7 **Q. Does the Global Parent issue debt and equity in the capital markets?**

8 A. As previously mentioned, the Global Parent issues debt. Because it is a limited liability
9 corporation, Global Parent has members rather than shareholders so it does not issue
10 common stock. However, the Global Parent can increase equity by selling new
11 memberships or by obtaining capital contributions from current members. Also, Global
12 may have additional access to capital markets if it reorganizes into a corporation and
13 issues stock as approved in Decision No. 70980, wherein the Commission approved its
14 application to reorganize into a corporation and issue common stock.
15

16 **Q. What was the Global Parent's capital structure at the end of the test year?**

17 A. At the end of 2008, Global Parent had short-term debt outstanding of \$63.6 million and
18 revenue bonds outstanding of \$114.7 million, while total members' equity was only \$6.2
19 million.
20

21 **Q. What were the capital structures of publicly traded water utilities in the United**
22 **States at December 31, 2008?**

23 A. Value Line Investment Survey follows five publicly-traded, large water utilities in the
24 United States. Exhibit LAJ-5 shows the capital structures of these utilities at
25 December 31, 2008. The average proportion of debt and equity in the capital structure of
26 the four companies is 48.8 percent debt and 51.2 percent equity.

1 **Q. What are the capital structures of other, large Arizona water utilities?**

2 A. On December 31, 2008, Arizona Water's capital structure was 51.8 percent debt and 48.2
3 percent equity. Arizona-American, another large Arizona utility had a capital structure of
4 61.4 percent debt and 38.6 percent equity on the same date.

5
6 **Q. How did Global arrive at the requested capital structures for Palo Verde and Santa
7 Cruz?**

8 A. According to the application and to the annual reports to the ACC, the capital structures of
9 Palo Verde and Santa Cruz at the end of the test year were both 100 percent equity.
10 However, for purposes of the rate filing the Global Utilities imputed the Global Parent's
11 bond debt to Palo Verde and Santa Cruz. The imputed revenue bonds were issued by
12 Pima County Industrial Development Authority ("IDA") to the Global Parent specifically
13 for the purpose of building water and sewer infrastructure and were allocated by the
14 Global Utilities for rate-making purposes to Santa Cruz and Palo Verde based upon the
15 relative value of the capital improvement projects to be financed by the bonds.

16
17 Staff concludes that the bonds were issued specifically for the benefit of the Utilities and
18 absent the existence of the Utilities would not have been issued at all. The addition of the
19 bonds to the Palo Verde and Santa Cruz capital structures also results in more reasonable
20 and more balanced capital structures than the reported 100 percent equity capital
21 structures. Although the proposed equity ratios are still somewhat higher than those of
22 other Arizona and national utilities, the resulting capital structures are within the range
23 Staff concludes is reasonable for a water utility that has access to the capital markets
24 through its affiliates. Thus, Staff recommends approval of the Global requested capital
25 structures for Palo Verde (45.3 percent debt and 54.7 percent equity) and Santa Cruz (43.9
26 percent debt and 56.1 percent equity).

1 **Q. What capital structure have the Utilities requested for Willow Valley?**

2 A. The requested a capital structure for Willow Valley is composed of 18.7 percent debt and
3 83.3 percent equity.

4
5 **Q. Does Staff believe the equity component of Willow Valley's capital structure fairly**
6 **represents the amount of equity which financed Willow Valley's plant?**

7 A. No. When the Global Parent acquired Western Maricopa Combine, Willow Valley's
8 immediate parent, it paid a price far above the book values of the subsidiary utilities.
9 Accordingly, Willow Valley's capital structure reflects capital used to fund the acquisition
10 which includes a rather large acquisition adjustment representing the premium Global paid
11 above the book value of the utility plant. According to Global's response to Data Request
12 LJ-6.2, the acquisition adjustment for Willow Valley was \$386,002.

13
14 **Q. What capital structure is Staff recommending for Willow Valley and why?**

15 A. Staff concludes that, as a starting point, the equity balance in Willow Valley's capital
16 structure should be reduced by the amount of the acquisition adjustment. Removing the
17 amount of the acquisition adjustment from equity, results in a capital structure for Willow
18 Valley (composed of 23.3 percent debt and 76.7 percent equity) that remains weighted
19 heavily toward equity. To protect the Willow Valley rate payers from the resulting
20 inefficient capital structure, Staff concludes that a hypothetical capital structure should be
21 adopted. Since Staff normally considers 60 percent as the maximum reasonable level of
22 equity for a for-profit water utility with access to the capital markets, Staff recommends a
23 hypothetical capital structure for Willow Valley composed of 40.0 percent debt and 60.0
24 percent equity.

1 **Q. What capital structures are Staff recommending for the West Valley companies?**

2 A. For Valencia-Town, adjusted for \$10,457,124 of acquisition premium, the capital structure
3 equals 32.8 percent debt and 67.2 percent equity. The equity ratio also exceeds a
4 reasonable level. Therefore, Staff also recommends a hypothetical capital structure of
5 40.0 percent debt and 60.0 percent equity.

6
7 However, the equity in Valencia-Buckeye's capital structure adjusted for \$1,830,068 of
8 acquisition premium, does not exceed Staff's standard. Staff recommends an adjusted,
9 actual capital structure of 54.9 percent long-term debt and 45.1 percent equity.

10
11 **Q. How did the Global Utilities determine the cost of debt?**

12 A. Global witness Gregory Barber used the interest rates on each utility's debt as the cost of
13 debt for each utility. For the smaller utilities, the debt is primarily debt from WIFA. For
14 the larger Palo Verde and Santa Cruz companies, he adopted the weighted cost of the
15 individual series of IDA Bonds issued by the Global Parent, but used to finance utility
16 plant of Palo Verde and Santa Cruz. Mr. Rowell, then, allocated the cost of the revenue
17 bonds to Palo Verde and Santa Cruz based upon the relative value of the capital projects
18 identified at the time of the IDA issuances.

19
20 **Q. Does Staff accept the costs of debt calculated by the Global Utilities?**

21 A. Yes, Staff accepts the following debt costs by system: Palo Verde, 6.3 percent; Santa
22 Cruz, 6.6 percent; Willow Valley, 5.5 percent; Valencia-Town, 6.7 percent and Valencia-
23 Buckeye, 6.6 percent.

24
25 **Q. What cost of equity are the Global Utilities requesting and how was it calculated?**

26 A. The Utilities are requesting a 10.0 percent cost of equity. According to the testimony of
27 Matt Rowell, the Utilities did not present an independent cost of equity analysis for this

1 rate case to save lengthy arguments which are costly and time consuming and are passed
2 on to rate payers as rate-case expenses. He relied on recent Staff testimony in the
3 Arizona-American rate case (Docket W-01303A-08-0227) in which Staff recommended a
4 cost of equity of 10 percent and on the similarity of the Utilities and Arizona-American
5 operations. The Utilities and Arizona-American both have geographically diverse service
6 territories and provide water and wastewater service.

7
8 **Q. What is Staff's opinion about Global's proposal to adopt a 10 percent return on**
9 **equity without a specific cost of equity analysis?**

10 **A.** Staff is well aware of the time and expense incurred by utilities, the Residential Utility
11 Consumer Office and Staff during contentious arguments over the cost of equity, and Staff
12 supports reasonable efforts to reduce unnecessary activities and costs. Staff recently
13 conducted a cost of equity analysis based on a sample of six water utilities and filed its
14 related cost of capital testimony on September 21, 2009, in Docket No. SW-02361A-08-
15 0609 for Black Mountain Sewer Corporation ("Black Mountain"). Although differences
16 in circumstances between utilities can cause differing results in the specific estimated
17 equity costs for each, the fundamental analysis is essentially the same. Accordingly, the
18 underlying analysis from the Black Mountain case can also reasonably be applied to this
19 case since that analysis is current and is based on a sample of water utilities. In the Black
20 Mountain case, Staff's cost of equity estimates for the sample companies ranged from 9.8
21 percent for the capital asset pricing model ("CAPM") to 10.7 percent for the discounted
22 cash flow method ("DCF"). Since Global's proposed 10.0 percent return on equity is
23 within Staff's recent estimated cost of equity range and because Staff supports Global's
24 efforts to reduce unnecessary activities and costs, Staff recommends adoption of Global
25 Utilities' proposed 10.0 percent cost of equity for this case.

Furthermore, the recent Commission decision (Decision No. 71308, dated October 21, 2009) adopted a 9.9 percent cost of equity for Chaparral City Water Company, Inc.

**PASS-THROUGH OF THE CENTRAL ARIZONA GROUNDWATER
REPLENISHMENT DISTRICT ASSESSMENTS**

Q. What are the Global Utilities requesting in regard to the fees or assessments charged by the Central Arizona Groundwater Replenishment District ("CAGR")?

A. Global is requesting the Commission approve a pass-through of the CAGR fees to the Utilities customers.

Q. As background to the CAGR, describe some of the requirements a developer must fulfill in order to subdivide.

A. Before a developer can sell lots, he or she must first receive a subdivision report from the Arizona Department of Real Estate ("ADRE"). For a development in an area which is in an Active Management Area, the ADRE requires a letter issued by the Arizona Department of Water Resources ("ADWR") confirming that there is sufficient water to serve the subdivision. If there is sufficient water, ADWR will issue to the developer a Certificate of Assured Water Supply ("CAWS").

There are seven criteria for proving an assured water supply to ADWR. An applicant must prove:

1. Physical availability of water for 100 years;
2. The water will be continuously available for 100 years
3. The water is legally available for 100 years
4. The water source meets water quality standards
5. The applicant is financially capable of installing the necessary water distribution and treatment facilities.

1 6. The use of the water is consistent with AMA Management Goals.

2
3 7. The use of the water is consistent with AMA Management Plans.

4
5 **Q. What is the CAGRD?**

6 A. The CAGRD was formed by the Arizona Legislature to provide a mechanism for
7 landowners and water providers to demonstrate the above criteria to obtain a CAWS. The
8 CAGRD is especially helpful to developers, landowners or water providers who have no
9 direct access to Central Arizona Project ("CAP") water or other renewable supplies. The
10 CAGRD's role is to "replenish" or recharge groundwater by the amount of groundwater
11 pumped or delivered to its members which exceeds the pumping limitations resulting from
12 the AMA Management Goals mentioned in Criterion 6. Membership in the CAGRD by
13 the developer (or the municipality or utility serving the developer) is accepted by ADWR
14 as proof of 100 year physical availability and that the developer's use of water is
15 consistent with ADWR water management goals.

16
17 **Q. Does a developer have an alternative to using membership in the CAGRD for the**
18 **purpose of obtaining CAWS to acquire a public report from ADRE?**

19 A. Yes, as an alternative to providing the ADRE a CAWS, the developer or landowner can
20 show ADRE a written commitment of service from a provider (i.e. water utility) which
21 holds a Designation of Assured Water Supply ("DAWS", or "Designation").

22
23 **Q. Have any of the Utilities received a Designation?**

24 A. Yes, Santa Cruz has received a Designation and WUGT filed an application for one with
25 ADWR two years ago.

1 **Q. How does a water system receive a Designation?**

2 A. The process and criteria are similar to those for a CAWs. To receive a Designation, an
3 Assured Water Supply must be proven for the whole service area, not just for an
4 individual development.

5
6 **Q. Why is it to a developer's advantage to acquire a written commitment of service**
7 **from a utility which holds a Designation of Assured Water Supply rather than**
8 **acquiring its own CAWS?**

9 A. Acquiring a written commitment of service from a utility which holds a Designation
10 would avoid the time and expense of applying for a CAWS and having to prove the
11 availability of a water supply which is physically available for 100 years. Often, proving
12 the 100 year water supply is an expensive process requiring hiring hydrologists, drilling
13 test wells, etc. Acquiring a commitment of service from a utility with a DAWS relieves
14 the developer of the time and expense necessary to receive a CAWS, but places those
15 burdens on the utility.

16
17 **Q. Why would a water utility need a Designation if developers can pursue a Certificate**
18 **of Assured Water supply on their own?**

19 A. Holding a Designation would increase the attractiveness of a Utility's service territory to
20 potential developers and landowners, which ultimately would add to growth in customers,
21 revenues and net income to the water utility. Also, according to Global witness Jaime
22 Moe's testimony, Page 19, lines 10 and 11, a Designation has "benefits related to water
23 conservation and regional planning of resources", although Global did not indicate
24 whether those benefits could be achieved without a Designation.

1 **Q. Do most water utilities have Designations?**

2 A. No. However, seven Commission-regulated water utilities do hold such Designations.
3 Among Arizona utilities listed by ADWR as holding a Designation, as of May 1, 2009, are
4 Johnson Utilities, LLC, and Chaparral City Water Company.
5

6 **Q. What would the impact be on Global Utilities customers if the Global Utilities did not**
7 **join the CAGRDR?**

8 A. If the Utilities did not join the CAGRDR, the individual developers would, in which case
9 many of Global Utilities customers would pay their share of the fees through their
10 property tax bills. However, they would not absorb the Global Utilities' costs of acquiring
11 a Designation.
12

13 **Q. How does it benefit the Global Utilities to join the CAGRDR?**

14 A. First, the membership would allow a Global Utility to exceed groundwater pumping
15 limitations. It would also be helpful in acquiring a DAWS. The DAWS, in turn, may
16 incent developers to develop in a Global Utility service territory. The DAWS also might
17 be helpful in regional planning.
18

19 **Q. What fees does the CAGRDR currently charge?**

20 A. The CAGRDR fees, also called assessments, depend upon which AMA the respective land
21 is located. The fees are divided into several components, all of which are calculated to
22 recover the costs and expenses of replenishing groundwater.
23

24 Currently, the CAGRDR determines the total cost to meet the replenishment obligations in
25 each AMA and divides that total by the number of acre-feet of replenishment obligation.
26 This process results in a replenishment rate that is charged against each member based on
27 the number of acre-feet of excess groundwater they deliver within their service areas

1 during a year (with various adjustments). Currently, in the Maricopa AMA, the annual
2 rate is \$318 per acre-foot which translates into almost one dollar per 1,000 gallons.
3

4 **Q. Are there steps a Global Utility could take to reduce payments to the CAGR?**

5 A. Besides not joining the CAGR, the only way to reduce payments to the CAGR is to
6 pump and deliver less groundwater.
7

8 **Q. How can a utility reduce the amount of groundwater it pumps?**

9 A. One way is to participate in ADWR's water recharge program and accumulate long-term
10 water storage credits for later use. This program was established by the Arizona
11 Legislature to encourage the use of renewable water supplies. It provides a vehicle by
12 which surplus supplies of water can be stored underground and recovered at a later date.
13 Persons who desire to store water through the Recharge Program must receive appropriate
14 permits from ADWR. The type of permit received depends on the type of the storage
15 facility, i.e. storage of water or in-lieu water.
16

17 Under the Program, as water is stored and not withdrawn, long-term water storage credits
18 can be earned by the permit holder storing the water. These credits can be used to
19 establish an Assured Water Supply for a CAWS or DAWS necessary to acquire a property
20 report from ADRE. These credits may also be bought and sold like any other commodity.
21 The owner of the long-term storage credit may never take delivery of the water and the
22 water storage credit may be purchased and sold any number of times.
23

24 **Q. Do any of the Global companies participate in the long-term water storage credit
25 program?**

26 A. Yes, they do. ADWR's Water Management Division published an Annual Status Report
27 on the Underground Water Storage, Savings and Replenishment Program for 2008. This

1 report lists the parties who participate in the program and the permits they have received.
2 A permit is required to operate a water storage facility, to store water and to create a water
3 storage account in which to accumulate water storage credits. According to this report,
4 during 2008, in the Phoenix AMA, WMC, the intermediate parent of the three west valley
5 Utilities, held permits for underground water storage facilities. The Report indicates that
6 WUGT, Valencia Water Company and Global Water Santa Cruz held water storage
7 permits, and WUGT, Water Utility of Greater Buckeye (now, Valencia-Buckeye) and
8 Valencia Water Company held permits for wells to recover stored water. Also, the Report
9 shows that only WUGT, Valencia Water Company and WMC held long-term storage
10 accounts.

11
12 In the Pinal AMA, underground water storage facilities permits were held by Picacho
13 Sewer Company (a new Global utility not participating in this case), Global Water-Palo
14 Verde Utilities Co. and Global Water. Water storage permits were held by Santa Cruz
15 Water Company, Picacho Sewer Company, and Global Water.

16
17 **Q. Where do the Global Utilities acquire the water to store?**

18 A. WUGT and Valencia enter incentive recharge contracts with the CAP which give the two
19 utilities the right to withdraw a certain amount of "excess" water from the CAP canal for
20 the purposes of recharge. After the water has been stored for one year, recharged, the
21 Utilities earn water storage credits.

22
23 **Q. Has the Global Parent benefited from the Global Utilities participation in the water
24 storage program?**

25 A. Yes, according to a purchase agreement filed with ADWR, Global sold 2007 and 2008
26 long-term water storage credits to Aqua Capital Management, LP ("Aqua Capital") for
27 \$3,392,263 on December 31, 2008. Attached to the purchase agreement is a form required

1 by ADWR for the transfer of the credit. The transfer document indicates that the seller of
2 the credits is the WUGT and not Global Parent. Also, the Global Parent consolidated
3 financial statements indicate a value of the stored water credits at \$1,175,675.
4

5 **Q. Have the Utilities received any compensation from the Global Parent for the sale,**
6 **transfer or use of their water storage credits by the Parent?**

7 A. No, they have not. The following is Global's explanation of why the Utilities do not
8 benefit from their water storage credits. According to the Utilities' responses to Staff data
9 request LJ-7.7:
10

11 All financial transactions for water employed in the generation of Long
12 Term Storage Credits were transacted by West Maricopa Combine (WMC)
13 and/or Global Parent. Incentive recharge CAP water is ordered by the
14 utility, but paid for directly by West Maricopa Combine - not the
15 utility...the Utilities did not pay for the construction of the facility...and do
16 not pay for the recharge or storage of that water. While the paper credits
17 accrue to the Long Term Storage Accounts of the utilities, they have not
18 paid to acquire, recharge or store the water. WMC and Global Parent have,
19 and thus WMC and Global Parent own the credits. These credits are never
20 'owned' by the utility and hence they are not sold or transferred to WMC.
21 WMC owns them outright from the beginning. The only role of the utility
22 is to place the order for Incentive Recharge Water with CAP.
23

24 Also, in response to LJ-7.9, the Utilities insist that a transfer of the water storage credits
25 from the utilities to Global Parent or WMC is not a transfer of assets under Arizona law
26 because "an intangible storage credit is not a "railroad, line, plant or system" it is not
27 subject to A.R.S. 40-285A. and that "only property that is currently being used to serve
28 customers is subject" to that law. Furthermore, "here, the credits are not currently being
29 used to serve customers..."

1 **Q. How do the Utilities benefit from the recharge facilities and from the water storage**
2 **credits?**

3 A. Apparently, the Global Parent does not share any of the benefits of the water storage
4 credits with the Utilities even though the Utilities own the permits necessary to facilitate
5 the sale and purchase of water storage credits.
6

7 **Q. Should the Utilities "give away" their water storage credits to the Global Parent**
8 **without compensation?**

9 A. The Utilities have given away the right to withdraw water they could use when they
10 receive membership in the CAGRDR. At that time, they could use their water storage
11 credits to reduce the amount of groundwater they pump, thus reducing the amount they
12 pay in CAGRDR assessments.
13

14 **Q. How can the benefits of the sale of storage credit sales be preserved for ratepayers?**

15 A. Staff concludes that the Utilities should recognize (i.e., record) a regulatory liability equal
16 to the net sales proceeds. The Commission could then determine the appropriate method
17 for ratepayers to benefit from the regulatory liability in a future rate proceeding. Staff also
18 concludes that the Utilities should file, every year, as a compliance filing in this docket,
19 the revenue received by Global Parent or its assignee(s) from the sale of water storage
20 credits generated by each Utility during the current year and for each prior year.
21

22 **Q. Does Staff recommend a pass-through for recovery of the CAGRDR fees for the**
23 **Global Utilities?**

24 A. No. First, according to Global witness Jaime Moe, on page 19, lines 7 and 8 of his
25 testimony, "Currently, none of the Global Utilities are directly charged the CAGRDR fees.
26 However, WUGT is working on the completion of a Designation of Assured Water
27 Supply and will become subject to direct CAGRDR fees." Thus, it is unknown when the

1 CAGR D fees will need to be paid. Nor is it known how much the fees will be and which
2 customers will be charged if, or when the Global Utilities actually pay the fees. CAGR D
3 is considering a bond issue which could increase fees to the members significantly.

4
5 However, if the Commission determines that it is in the public interest to put a mechanism
6 in place to recover future CAGR D fees incurred by the Utilities, Staff recommends the
7 CAGR D fees should be collected through an adjustor mechanism similar to that
8 recommended by Staff in the Johnson Utilities case (Docket No. WS-02987A-08-0180).

9
10 **DISTRIBUTED RENEWABLE ENERGY RECOVERY TARIFF**

11 **Q. What are the Utilities plans in regard to the use of solar energy at its water and**
12 **wastewater plants?**

13 A. In Decision No. 71237, dated August 6, 2009, Santa Cruz was granted authority to enter a
14 \$3.7 million WIFA loan for the purposes of financing SCADA assets and constructing and
15 installing a solar system to provide electricity to its Water Center in Maricopa. Palo
16 Verde also intends to construct solar installations for its wastewater treatment plants.

17
18 **Q. What are the Utilities requesting regarding recovery of the costs of the solar facilities**
19 **or other distributed energy?**

20 A. According to Page 10 of the direct testimony of Jaime Moe, "[T]he Commission should
21 incent the practice of distributed power generation by allowing Global to utilize an
22 approach similar to the arsenic cost recovery mechanism ("ACRM") the Commission has
23 approved for the development of arsenic treatment facilities."

24
25 **Q. How would the Utilities' proposed tariff work?**

26 A. Global proposes that after the construction of a renewable energy plant, such as solar, it
27 would file an application detailing the costs and technical specifications of the plant and

1 its related expenses In that filing, the Utilities would request that the tariff result in
2 recovery of a return on the plant, depreciation expense and related expenses. These
3 amounts would be offset by the savings from the reduction in electricity purchased to run
4 the water or wastewater plant. The surcharge would apply to the monthly minimum
5 charge and commodity charge.

6
7 On Page 12 of his testimony, Mr. Moe indicated that the Utilities also would request
8 "accelerated recovery" so "customers receive accelerated recognition of the benefit of
9 renewable distributed generation." He also proposed that the surcharge would apply to
10 other, non-solar projects that use technologies which qualify as renewable under the
11 Renewable Energy Standard and Tariff ("REST") Rules.

12
13 **Q. What are the Utilities' plans for distributed energy?**

14 A. The solar plant referred to in Decision No. 71237 was to provide electricity to the Water
15 Center of Santa Cruz. Mr. Moe's testimony indicates solar would be installed near "water
16 reclamation" plants belonging to Palo Verde.

17
18 **Q. Do any Arizona water utilities have experience installing and using solar panels to**
19 **run utility plant?**

20 A. Yes, Johnson Utilities Company in the Southeast Valley recently constructed two
21 installations of photovoltaic solar panels, the newest of which generates 1.1 MW of
22 electricity.

23
24 **Q. Has Johnson Utilities Company requested a surcharge to recover the costs of the**
25 **installations?**

26 A. No, it has not.

1 **Q. What costs and expenses are adjustor mechanisms usually designed to recover?**

2 A. Generally, adjustors and other automatic recovery mechanisms are used to recover
3 principal and interest on debt used for the costs of reaching government-mandated
4 standards such as arsenic treatment, or to recover costs that are disproportionately large,
5 highly variable and substantially out of the control of the utility such as fuel and purchased
6 power adjusters.

7
8 **Q. What are some of the risks associated with investing in solar power to run water and**
9 **wastewater plants?**

10 A. The Utilities have no experience purchasing or operating solar facilities. Also, the
11 Utilities have requested that the proposed tariff allow recovery of the costs of distributed
12 renewable energy which is defined by the Commission's REST Rules as including solar,
13 biomass systems, geothermal and wind technologies. The Utilities' expertise in those
14 areas would likely need to be significantly expanded before attempting to implement all or
15 some of those technologies. As these technologies are still evolving, the plants could be
16 incorrectly manufactured, sized or installed, run in an inefficient manner or result in the
17 generation of electricity at less than prudent costs. However, a mechanism which flows
18 through the operating and capital costs of the distributed energy facilities would protect
19 the Utilities from such risks and transfer the risks to the ratepayers.

20
21 **Q. Have the Global Utilities provided evidence that the costs of the solar facilities,**
22 **including installation, operation, depreciation and return, will result in net savings to**
23 **the ratepayers on an annual basis?**

24 A. No, they have not. The brief example included in the Utilities' testimony sets forth an
25 estimate of annual electricity bill savings of approximately \$60,000 from a \$2.0 million
26 investment in solar. Thus, according to the Utilities' plan, the ratepayers would be paying

1 a return on, and a return of Global's investment for at least 33 years before the savings on
2 the Utilities' electricity bill would exceed the size of the investment.

3
4 **Q. Would establishment of a cost recovery mechanism for the solar installations likely**
5 **encourage utilities to use or expand the use of distributed energy technologies?**

6 A. Yes. If a utility is protected from some or all the financial risks attendant with newer,
7 distributed energy technology, it is more likely to avail itself of those technologies. A
8 recovery mechanism would be helpful in acquiring financing for the projects, especially
9 given the state of the Global Parent's financial health, by providing investors assurance of
10 earning the expected return on their potential investment.

11
12 **Q. Who provides electric service in the area of the City of Maricopa?**

13 A. APS and Electrical District 3 ("ED3) provides electric service in the Maricopa area.
14

15 **Q. What are the REST Rules and what do the REST Rules require from APS?**

16 A. The REST Rules (A.A.C. R14-2-1801-1816) were passed by the Commission to
17 encourage the use of renewables to generate electricity. The Rules require APS to meet an
18 Annual Renewable Energy Requirement. This requirement is stated as a percentage of
19 total annual retail electricity sales that must come from renewable sources. To meet the
20 requirement, APS must include in its resources a certain amount of distributed renewable
21 energy, such as solar plants.

22
23 Under the REST Rules, APS must provide financial incentives to customers to encourage
24 construction and use of renewable energy projects. Once built, the projects can be
25 included as partial fulfillment of APS' Annual Renewable Energy Requirement.

1 **Q. Do the REST Rules apply to Palo Verde and Santa Cruz?**

2 A. No, they do not. Palo Verde and Santa Cruz are customers of Electrical District No. 3
3 ("ED3"). However, some of the Palo Verde and Santa Cruz customers are APS customers
4 and the REST Rules would apply to them.

5
6 **Q. Is Staff aware of an open docket (Docket No. E-01345A-08-0426) wherein APS is**
7 **transferring assets to ED3 which results in many of the APS Maricopa area**
8 **customers being transferred to ED3?**

9 A. Yes. The Commission has not yet issued a decision in the transfer docket. However, ED3
10 filed a statement in the transfer docket on October 2, 2009, its new Amended Renewable
11 Energy Policy, where it commits to implementing a renewable energy policy. The filing
12 also commits to "helping its customers conserve energy and save money through the use
13 of energy-efficiency programs, the Renewable Energy Standard and Tariff rules....and the
14 rules being promulgated in the energy efficiency rulemaking docket now pending at the
15 Commission."

16
17 **Q. What do the REST Rules require from APS customers, including those in Maricopa**
18 **and the West Valley who are also customers of the Global Utilities?**

19 A. The REST Rules and the Commission's approval of the APS 2009 REST Plan require all
20 APS customers to pay, through a monthly Renewable Energy Standard Adjustor,
21 \$0.007937 per kWh, with monthly caps of \$3.17 for residential customers, \$117.93 for
22 non-residential customers and \$353.78 for non-residential customers with demands of 3
23 MW or greater.

1 **Q. How much revenue could be collected from the residential customers of Palo Verde**
2 **alone through APS Renewable Energy Standard Adjustor and a similar ED3**
3 **adjustor each year?**

4 A. A rough approximation would be calculated by multiplying Palo Verde's 15,000
5 customers by the \$3.17 cap (reached at 400 kWh) and multiplying by 12 which results in
6 \$570,600 per year. That amount is greater than one-fourth of the Global Utilities'
7 expected cost of its planned solar plant of approximately \$2.0 million.

8
9 The amount paid by Palo Verde customers would be used by APS and ED3 to meet its
10 Annual Renewable Energy Requirement which could include incentives (rebates) to Palo
11 Verde for its planned solar generation plant at Global's Palo Verde facilities in Maricopa.

12
13 **Q. Are there other incentives to build solar facilities in Arizona which are financed by**
14 **taxpayers?**

15 A. Yes, there are state and federal tax credits available.

16
17 **Q. If the Global Utilities flow through to their customers the depreciation, other related**
18 **expenses and a return on the investment in distributed energy facilities, what impact**
19 **might it have on the customers?**

20 A. Essentially, the Global Utilities will have transferred all the costs and risks of the facilities
21 to the customers, many of whom may have already paid for some or all of the facilities
22 through the REST surcharge and state and local tax credits. The current and proposed
23 ED3 customers, according to ED3's filing in the transfer docket, may soon be in similar
24 circumstances.

1 **Q. What is Staff's recommendation regarding the distributed renewable energy**
2 **recovery tariff requested by the Utilities?**

3 A. Staff recommends denial of the tariff. Staff believes that the APS rebate (which customers
4 pay for in their energy bill) and income tax credits (which customers/taxpayers ultimately
5 pay for in their income tax payments) will offset a considerable portion, if not all of the
6 costs of the Global Utilities' distributed energy projects in Maricopa.

7
8 Staff believes the remainder of the cost, if any, should be treated as any other generation
9 plant. If found prudent, the Global Utilities should recover the actual, incurred costs in
10 rate base and expenses determined within a rate case, rather than through a direct,
11 "accelerated" mechanism.

12
13 **Q. Have the Utilities filed any meaningful analysis of the costs to be recovered or filed a**
14 **sample tariff which illustrates the nuts and bolts of the mechanism they are**
15 **requesting?**

16 A. No, they have not. Neither have the Utilities presented any analysis which indicates that
17 they have considered leasing such facilities. Nor have they delineated which plant, capital
18 costs and which operating and maintenance costs for which they are requesting recovery
19 through an adjustor.

20
21 **Q. Does this conclude your direct testimony?**

22 A. Yes, it does.

CALCULATION OF ICFA RATE BASE ADJUSTMENTS
(Source: Company response to LJ-3.10a)

WATER UTILITY OF GREATER TONOPAH

ICFA Fees Collected by Contract:

2006-0939440	WUGT	\$	5,819,850		
2006-0939366	WUGT	\$	2,531,250		
2008-0061205	HUC and WUGT	\$	500,000		
2008-0679693	HUC and WUGT	\$	375,000		
		\$	9,226,100		
Hassayampa Utilities Net Plant (a)		\$	1,440,781	23.2%	
Water Utility Greater Tonopah Net Plant		\$	4,764,594	76.8%	
Total Plant		\$	6,205,375		
2006-0939440	WUGT	\$	5,819,850		\$ 5,819,500
2006-0939366	WUGT	\$	2,531,250		\$ 2,531,250
2008-0061205	WUGT Allocation	\$	500,000	76.8%	\$ 384,000
2008-0679693	WUGT Allocation	\$	375,000	76.8%	\$ 288,000
Total WUGT Rate Base Adjustment					\$ 9,022,750

PALO VERDE AND SANTA CRUZ

(Source: Company response to LJ-3.10a)

ICFA fees Collected from Maricopa (Excluding Picacho Cove)	\$	49,982,522		
Palo Verde Net Plant (Schedule E-1)	\$	108,965,553	50.9%	
Santa Cruz Net Plant (Schedule E-1)	\$	105,113,290	49.1%	
Total	\$	214,078,843		
Palo Verde Allocation	\$	49,982,522	50.9%	\$ 25,441,104
Santa Cruz Allocation	\$	49,982,522	49.1%	\$ 24,541,418
Palo Verde excess capacity RB reduction - Company	\$	14,449,976		
Santa Cruz excess capacity RB reduction - Company	\$	17,941,342		
Total	\$	32,391,318		
Total Palo Verde Rate Base Adjustment (Allocated ICFA fees less excess capacity adj.) (\$25,440,969 minus \$14,449,976)				\$ 10,991,128
Total Santa Cruz Rate Base Adjustment (Allocated ICFA fees less excess capacity adj.) (\$24,541,553 minus \$17,941,342)				\$ 6,600,076

(a) Hassayampa Utilities (HUC) is a Global subsidiary not included in this rate case.

Global Water - Palo Verde Utilities Company
Docket No. SW-20445A-09-0077
Valencia Water Company - Greater Buckeye Division
Docket No. W-02451A-09-0078
Willow Valley Water Company
Docket No. W-01732A-09-0079
Global Water - Santa Cruz Water Company
Docket No. SW-20446A-09-0080
Water Utility of Greater Tonopah
Docket No. W-02450A-09-0081
Valencia Water Company - Town Division
Docket No. W-01212A-09-0082
RESPONSE TO STAFF'S ELEVENTH SET OF DATA REQUESTS
DATED August 13, 2009

Subject: All information responses should **ONLY** be provided in searchable PDF, DOC or EXCEL files via email or electronic media.

STF 11.2 What benefits do Palo Verde and Santa Cruz derive from entering the License Agreements with Maricopa and Casa Grande?

RESPONSE: Palo Verde and Santa Cruz receive many benefits from the Memoranda of Understanding with Maricopa and Casa Grande, including:

1. Commitments from Maricopa and Casa Grande to participate in water resource conservation planning and activities. Municipal support for conservation will encourage the development of local codes and bylaws that result in substantial water conservation (e.g. building code and plumbing code approvals for delivery of recycled water to residential homes; adoption of residential landscaping restrictions to maximize xeriscape; the use of recycled water inside municipal buildings, etc.)(Maricopa MOU § 9; Casa Grande MOU at § 8)
2. Support for Regional Planning initiatives to implement "Total Water Management", including use of recycled water. (MOU recitals; Casa Grande MOU § 10; Maricopa MOU § 11);
3. Support and cooperation regarding community outreach and education regarding water conservation, including use of recycled water. (Maricopa MOU §§ 8, 13; Casa Grande MOU §§ 7, 12)
4. Access to municipal facility GIS data to provide for more efficient utility plant conflict resolution (e.g. Bluestake) and emergency response. (Maricopa MOU § 14; Casa Grande MOU § 13)
5. Streamlined construction permit reviews. This benefits all construction projects of the Global Utilities, including projects such as Solar Power Projects and recycled water facilities. (Maricopa MOU § 16; Casa Grande MOU § 15)
6. Support for consolidation. (MOU recitals)
7. The ability to install, operate and maintain water, wastewater and recycled water infrastructure within municipal and public rights of way. (Maricopa MOU § 5; Casa Grande MOU § 4).

Global Water - Palo Verde Utilities Company
Docket No. SW-20445A-09-0077
Valencia Water Company - Greater Buckeye Division
Docket No. W-02451A-09-0078
Willow Valley Water Company
Docket No. W-01732A-09-0079
Global Water - Santa Cruz Water Company
Docket No. SW-20446A-09-0080
Water Utility of Greater Tonopah
Docket No. W-02450A-09-0081
Valencia Water Company - Town Division
Docket No. W-01212A-09-0082
RESPONSE TO STAFF'S ELEVENTH SET OF DATA REQUESTS
DATED August 13, 2009

Subject: All information responses should **ONLY** be provided in searchable PDF, DOC or EXCEL files via email or electronic media.

8. Support for low-cost Industrial Development Authority financing. (Maricopa MOU § 6; Casa Grande MOU § 5). By proposing "imputation" of this debt, the Global Utilities have ensured that ratepayers receive the benefit of this low-cost financing.

RESPONDENT: Graham Symmonds, SVP Regulatory Affairs and Compliance

WITNESS: Graham Symmonds, SVP Regulatory Affairs and Compliance

Staff Recommended
Capital Structure, Cost of Capital and Weighted Cost of Capital
 Test Year Ending 12/31/08

Palo Verde Utilities		<u>%</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long-term Debt	\$ 63,529,266	45.3%	6.3%	2.9%
Equity	<u>\$ 76,564,739</u>	54.7%	10.0%	<u>5.5%</u>
Weighted Cost of Capital	\$ 140,094,005			8.3%

Santa Cruz Water Company		<u>%</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long-term Debt	\$ 51,650,734	43.9%	6.6%	2.9%
Equity	<u>\$ 65,933,751</u>	56.1%	10.0%	<u>5.6%</u>
Weighted Cost of Capital	\$ 117,584,485			8.5%

Willow Valley Water Company		<u>%</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long-term Debt		40.0%	5.5%	2.2%
Equity		60.0%	10.0%	<u>6.0%</u>
Weighted Cost of Capital	\$ -			8.2%

Valencia-Town		<u>%</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long Debt		40.0%	6.7%	2.7%
Equity		60.0%	10.0%	<u>6.0%</u>
Total cap	\$ -			8.7%

Valencia-Buckeye		<u>%</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long Debt	\$ 168,100	54.9%	6.6%	3.6%
Equity	<u>\$ 137,852</u>	45.1%	10.0%	<u>4.5%</u>
Total cap	\$ 305,952			8.1%

Utilities Recommended
Capital Structure, Cost of Capital and Weighted Cost of Capital
 Test Year Ending 12/31/08

<u>Palo Verde Utilities</u>	<u>%</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long Debt	45.0%	6.34%	2.85%
Equity	55.0%	10.00%	5.50%
Weighted Cost of Capital			8.35%

<u>Santa Cruz Water Company</u>	<u>%</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long Debt	44.0%	6.57%	2.89%
Equity	56.0%	10.00%	5.60%
Weighted Cost of Capital			8.49%

<u>Willow Valley Water Company</u>	<u>%</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long Debt	17.0%	5.48%	0.93%
Equity	83.0%	10.00%	<u>8.30%</u>
Weighted Cost of Capital			9.23%

<u>WUGT</u>	<u>%</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long Debt	2.0%	6.30%	0.13%
Equity	98.0%	10.00%	<u>9.80%</u>
Weighted Cost of Capital			9.93%

<u>Valencia-Buckeye</u>	<u>%</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long Debt	8.0%	6.38%	0.51%
Equity	92.0%	10.00%	<u>9.20%</u>
Weighted Cost of Capital			9.71%

<u>Valencia-Town</u>	<u>%</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long Debt	13.0%	6.73%	0.87%
Equity	87.0%	10.00%	<u>8.70%</u>
Weighted Cost of Capital			9.57%

Source: Direct Testimony of Matt Rowell, Pages 31 and 32.

National and Arizona Water Companies
Capital Structure
12/31/08

	<u>Long-term Debt</u>	<u>Common Equity</u>	<u>Preferred Stock</u>
<u>Value Line Rated Companies</u>			
American Water Works Company	53.1%	46.9%	-
American States Water Co.	46.2%	53.8%	-
Aqua America, Inc.	54.1%	45.9%	-
California Water Service Group	41.6%	58.4%	-
Average	48.8%	51.3%	
<u>Other Publicly Traded Water Utilities</u>			
SJW	46.0%	54.0%	-
York Water Company	54.5%	45.5%	-
Pennichuck Corporation	55.5%	44.5%	-
Middlesex Water Company	45.6%	53.1%	1.3%
Connecticut Water Service, Inc.	46.9%	52.7%	0.4%
Artesian Resources Corporation	55.1%	44.9%	-
Average	50.6%	49.1%	0.8%
<u>Large Arizona Water Companies</u>			
Arizona Water Company	51.8%	48.2%	
Arizona American - Water & Sewer	54.6%	45.4%	

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES

Chairman

GARY PIERCE

Commissioner

PAUL NEWMAN

Commissioner

SANDRA D. KENNEDY

Commissioner

BOB STUMP

Commissioner

IN THE MATTER OF THE APPLICATION OF)
GLOBAL WATER – PALO VERDE UTILITIES)
COMPANY FOR THE ESTABLISHMENT OF JUST)
AND REASONABLE RATES AND CHARGES FOR)
UTILITY SERVICE DESIGNED TO REALIZE A)
REASONABLE RATE OF RETURN ON THE FAIR)
VALUE OF ITS PROPERTY THROUGHOUT THE)
STATE OF ARIZONA.)

DOCKET NO. SW-20445A-09-0077

IN THE MATTER OF THE APPLICATION OF)
VALENCIA WATER COMPANY - GREATER)
BUCKEYE DIVISION FOR THE ESTABLISHMENT)
OF JUST AND REASONABLE RATES AND)
CHARGES FOR UTILITY SERVICE DESIGNED TO)
REALIZE A REASONABLE RATE OF RETURN ON)
THE FAIR VALUE OF ITS PROPERTY)
THROUGHOUT THE STATE OF ARIZONA.)

DOCKET NO. W-02451A-09-0078

IN THE MATTER OF THE APPLICATION OF)
WILLOW VALLEY WATER COMPANY FOR THE)
ESTABLISHMENT OF JUST AND REASONABLE)
RATES AND CHARGES FOR UTILITY SERVICE)
DESIGNED TO REASONABLE RATE)
OF RETURN ON THE FAIR VALUE OF ITS)
PROPERTY THROUGHOUT THE STATE OF)
ARIZONA.)

DOCKET NO. W-01732A-09-0079

IN THE MATTER OF THE APPLICATION OF)
GLOBAL WATER – SANTA CRUZ WATER COMPANY)
COMPANY FOR THE ESTABLISHMENT OF JUST)
AND REASONABLE RATES AND CHARGES FOR)
UTILITY SERVICE DESIGNED TO REALIZE A)
REASONABLE RATE OF RETURN ON THE FAIR)
VALUE OF ITS PROPERTY THROUGHOUT THE)
STATE OF ARIZONA.)

DOCKET NO. W-20446A-09-0080

IN THE MATTER OF THE APPLICATION OF)
WATER UTILITY OF GREATER TONOPAH FOR)
THE ESTABLISHMENT OF JUST AND)
REASONABLE RATES AND CHARGES FOR)
UTILITY SERVICE DESIGNED TO REALIZE A)
REASONABLE RATE OF RETURN ON THE FAIR)
VALUE OF ITS PROPERTY THROUGHOUT THE)
STATE OF ARIZONA.)

DOCKET NO. W-02450A-09-0081

IN THE MATTER OF THE APPLICATION OF)
VALENCIA WATER COMPANY – TOWN DIVISION)
FOR THE ESTABLISHMENT OF JUST AND)
REASONABLE RATES AND CHARGES FOR)
UTILITY SERVICE DESIGNED TO REALIZE A)
REASONABLE RATE OF RETURN ON THE FAIR)
VALUE OF ITS PROPERTY THROUGHOUT)
THE STATE OF ARIZONA.)

DOCKET NO. W-01212A-09-0082

DIRECT
TESTIMONY
OF
CRYSTAL S. BROWN
PUBLIC UTILITIES ANALYST V
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

OCTOBER 26, 2009

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Consolidated (Town Division, Buckeye, and Tonopah)

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EXECUTIVE SUMMARY

GLOBAL WATER – PALO VERDE UTILITIES COMPANY, DOCKET NO. SW-20445A-09-0077
GLOBAL WATER – SANTA CRUZ WATER COMPANY, DOCKET NO. W-20446A-09-0080
WILLOW VALLEY WATER COMPANY, DOCKET NO. W-01732A-09-0079
VALENCIA WATER COMPANY – TOWN DIVISION, DOCKET NO. W-01212A-09-0082
VALENCIA WATER COMPANY – GREATER BUCKEYE DIVISION, DOCKET NO. W-02451A-09-0078
WATER UTILITY OF GREATER TONOPAH, DOCKET NO. W-02450A-09-0081

Global Water - Palo Verde Utilities Company ("Palo Verde"), Global Water – Santa Cruz Water Company ("Santa Cruz"), Willow Valley Water Company ("Willow Valley"), Valencia Water Company – Town Division ("Town Division"), Valencia Water Company – Greater Buckeye Division ("Buckeye"), and Water Utility of Greater Tonopah ("Tonopah"), collectively "Global Companies", are certificated Arizona public service corporations that provided water and wastewater utility service during the test year of 2008 in various parts of Arizona. The average number of customers per company during the test year was as follows: 15,152, Palo Verde; 15,371, Santa Cruz; 1,559, Willow Valley; 5,024, Town Division; 620, Buckeye; and 346, Tonopah.

On February 20, 2009, Global Water filed applications for permanent rate increases. Palo Verde states that it experienced a \$144,516 test year operating income resulting in a 0.23 percent rate of return. Santa Cruz states that it experienced a \$1,969,624 test year operating income resulting in a 4.35 percent rate of return. Willow Valley states that it incurred a \$95,459 test year operating loss resulting in no rate of return. Town Division states that it incurred a \$601,944 test year operating loss resulting in no rate of return. Buckeye states that it incurred a \$4,402 test year operating loss resulting in no rate of return. Tonopah states that it incurred a \$153,369 test year operating loss resulting in no rate of return.

Palo Verde

Palo Verde proposed an \$8,493,380, or 130.24 percent revenue increase from \$6,521,201 to \$15,014,581. The proposed revenue increase would produce an operating income of \$5,307,395 for an 8.34 percent rate of return on an original cost rate base ("OCRB") of \$63,637,830. Staff recommends a \$5,444,899 or 81.95 percent revenue increase from \$6,643,813 to \$12,088,712. Staff's recommended revenue increase would produce an operating income of \$4,438,060 for an 8.30 percent rate of return on an OCRB of \$53,470,597.

Santa Cruz

Santa Cruz proposed a \$3,081,292, or 33.82 percent revenue increase from \$9,110,720 to \$12,192,012. The proposed revenue increase would produce an operating income of \$3,842,652 for an 8.49 percent rate of return on an OCRB of \$45,260,919. Staff recommends a \$1,142,237 or 12.14 percent revenue increase from \$9,409,861 to \$10,552,098. Staff's recommended revenue increase would produce an operating income of \$3,328,234 for an 8.50 percent rate of return on an OCRB of \$39,155,692.

Willow Valley

Willow Valley proposed a \$499,229, or 105.43 percent, revenue increase from \$473,527 to \$972,756. The proposed revenue increase would produce an operating income of \$208,008 for a 9.24 percent rate of return on an OCRB of \$2,251,164. Staff recommends a \$428,289 or 90.45 percent revenue increase from \$473,527 to \$901,816. Staff's recommended revenue increase would produce an operating income of \$184,595 for an 8.20 percent rate of return on an OCRB of \$2,251,164.

Town Division

Town Division proposed a \$1,657,078, or 57.25 percent, revenue increase from \$2,894,421 to \$4,551,499. The proposed revenue increase would produce an operating income of \$405,346 for a 9.56 percent rate of return on an OCRB of \$4,240,018. Staff recommends a \$1,439,278 or 47.38 percent revenue increase from \$3,037,462 to \$4,476,740. Staff's recommended revenue increase would produce an operating income of \$368,882 for an 8.70 percent rate of return on an OCRB of \$4,240,018.

Buckeye

Buckeye proposed a \$155,800, or 46.26 percent, revenue increase from \$336,819 to \$492,619. The proposed revenue increase would produce an operating income of \$90,304 for a 9.72 percent rate of return on an OCRB of \$929,057. Staff recommends a \$72,258 or 18.99 percent revenue increase from \$380,474 to \$452,732. Staff's recommended revenue increase would produce an operating income of \$75,254 for an 8.10 percent rate of return on an OCRB of \$929,057.

Tonopah

Tonopah proposed a \$677,177, or 261.15 percent, revenue increase from \$259,304 to \$936,481. The proposed revenue increase would produce an operating income of \$258,267 for a 9.94 percent rate of return on an OCRB of \$2,598,259. Staff recommends a \$23,144 or an 8.93 percent revenue decrease, from \$259,304 to \$236,160. Staff's recommended revenue decrease would produce an operating margin of 10.00 percent or \$23,616. Staff's recommended OCRB is a negative \$6,123,255.

1 **INTRODUCTION**

2 **Q. Please state your name, occupation, and business address.**

3 A. My name is Crystal S. Brown. I am a Public Utilities Analyst V employed by the Arizona
4 Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff").
5 My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

6
7 **Q. Briefly describe your responsibilities as a Public Utilities Analyst V.**

8 A. I am responsible for the examination and verification of financial and statistical
9 information included in utility rate applications. In addition, I develop revenue
10 requirements, prepare written reports, testimonies, and schedules that include Staff
11 recommendations to the Commission. I am also responsible for testifying at formal
12 hearings on these matters.

13
14 **Q. Please describe your educational background and professional experience.**

15 A. I received a Bachelor of Science Degree in Business Administration from the University
16 of Arizona and a Bachelor of Science Degree in Accounting from Arizona State
17 University.

18
19 Since joining the Commission in August 1996, I have participated in numerous rate cases
20 and other regulatory proceedings involving electric, gas, water, and wastewater utilities. I
21 have testified on matters involving regulatory accounting and auditing. Additionally, I
22 have attended utility-related seminars sponsored by the National Association of
23 Regulatory Utility Commissioners ("NARUC") on ratemaking and accounting designed to
24 provide continuing and updated education in these areas.

1 **Q. What is the scope of your testimony in this case?**

2 A. I am presenting Staff's analysis and recommendations in the areas of rate base and
3 operating revenues and expenses regarding Global Water - Palo Verde Utilities Company,
4 Valencia Water Company – Greater Buckeye Division, Willow Valley Water Company,
5 Global – Water Santa Cruz Water Company, Water Utility of Greater Tonopah, and
6 Valencia Water Company – Town Division (collectively “Global Companies” or
7 “Companies”) applications for a permanent rate increase. Staff witness Darak Eaddy is
8 presenting Staff's rate design recommendations. Staff witness Linda Jaress is presenting
9 Staff's cost of capital and Infrastructure Coordination Financing Agreements (“ICFA”)
10 recommendations. Staff witness Jian Liu is presenting Staff's engineering analysis and
11 recommendations.
12

13 **Q. What is the basis of your recommendations?**

14 A. I performed a regulatory audit of the Global Companies' applications to determine
15 whether sufficient, relevant, and reliable evidence exists to support the Companies'
16 requested rate increases. The regulatory audit consisted of examining and testing the
17 financial information, accounting records, and other supporting documentation and
18 verifying that the accounting principles applied were in accordance with the Commission-
19 adopted NARUC Uniform System of Accounts (“USOA”).
20

21 **BACKGROUND**

22 **Q. Please review the background of these applications.**

23 A. The Global Companies are certificated Arizona public service corporations that provide
24 water or wastewater utility service to customers in various parts of Arizona.

1 The Global Companies are owned by Global Water Resources, LLC. The Global
2 Companies have no employees and are managed and operated by Global Water, Inc.

3
4 Global Water - Palo Verde Utilities Company's ("Palo Verde") current rates were
5 authorized in Decision No. 61943, dated September 17, 1999. That Decision authorized
6 Palo Verde's original Certificate of Convenience and Necessity.

7
8 Global Water - Santa Cruz Water Company's ("Santa Cruz") current rates were authorized
9 in Decision No. 61943, dated September 17, 1999. That Decision authorized Santa Cruz's
10 original Certificate of Convenience and Necessity.

11
12 Willow Valley Water Company's ("Willow Valley") current rates were authorized in
13 Decision No. 63612, dated April 27, 2001. That Decision authorized a \$45,640 revenue
14 increase that provided a 9.99 percent rate of return on a \$568,596 fair value rate base,
15 which was also the original cost rate base.

16
17 Valencia Water Company – Town Division's ("Town Division") current rates were
18 authorized in Decision No. 60832, dated April 30, 1998. That Decision authorized a
19 \$61,219 revenue increase that provided a 10.41 percent rate of return on a \$537,773 fair
20 value rate base, which was also the original cost rate base.

21
22 Valencia Water Company – Greater Buckeye Division's ("Buckeye") current rates were
23 authorized in Decision No. 60386, dated August 29, 1997. That Decision authorized an
24 \$18,225 revenue increase that provided an 11.57 percent rate of return on an \$81,044 fair
25 value rate base, which was also the original cost rate base.

1 Water Utility of Greater Tonopah's ("Tonopah") current rates were authorized in Decision
2 No. 62092, dated November 19, 1999. That Decision authorized a \$12,004 revenue
3 increase that provided a 10.34 percent rate of return on a \$156,270 fair value rate base,
4 which was also the original cost rate base.

5
6 **Q. What are the primary reasons for the Global Companies' requested permanent rate**
7 **increase?**

8 A. According to the Global Companies, the primary reasons are to recover increased
9 operating expenses and/or to earn its authorized rate of return on its rate base, which has
10 increased significantly since the last rate cases.

11
12 **CONSUMER SERVICE**

13 **Q. Please provide a brief history of customer complaints received by the Commission**
14 **regarding the Global Companies.**

15 A. Staff reviewed the Commission's records for the period January 1, 2006, through October
16 8, 2009, and found:

17
18 *Palo Verde*

19 2006 – Zero complaints/opinions

20 2007 – Five complaints (billing, two quality of service, two disconnect/termination)

21 2008 – Twelve complaints (six billing, deposit, five disconnect/termination)

22 2009 – Five complaints (three billing, quality of service, disconnect/termination)

23 Eighteen opinions (opposed to the rate case)

24 All Palo Verde complaints have been resolved and closed.

1 *Santa Cruz*

2 2006 – Six complaints (four billing, two quality of service)

3 2007 – Thirteen complaints (ten billing, service, two disconnect/termination)

4 2008 – Twenty-one complaints (fourteen billing, two deposit, new service, quality of
5 service, three disconnect/termination)

6 2009 – Fifty-five complaints (seventeen billing, five deposits, new service, nineteen
7 quality of service, thirteen disconnect/termination)

8 One hundred eleven opinions (opposed to the rate case)

9 All complaints have been resolved and closed.
10

11 *Willow Valley*

12 2006 – Eight complaints (five billing, three quality of service)

13 2007 – Six complaints (service, five quality of service)

14 2008 – Four complaints (two billing, two quality of service)

15 2009 – Five complaints (three billing, two quality of service)

16 Two opinions (opposed to the rate case)

17 All complaints have been resolved and closed.
18

19 *Town Division*

20 2006 – Thirteen complaints (seven billing, two deposits, four quality of service)

21 2007 – Twenty-one complaints (six billing, disc/term, two quality of service, eleven other,
22 new service)

23 2008 – Eight complaints (six billing, disconnect/termination, other)

1 2009 – Fourteen complaints (six billing, three deposits, three quality of service,
2 disconnect/termination, other)

3 All complaints have been resolved and closed.

4
5 *Buckeye*

6 2006 – One complaint (quality of service)

7 2007 – Two complaints (billing, quality of service)

8 2008 – Four complaints (three quality of service, new service)

9 2009 – Five complaints (three quality of service, two billing)

10 All complaints have been resolved and closed.

11
12 *Tonopah*

13 2006 – Three complaints (billing issues)

14 2007 – Five complaints (two billing, water quality, MXA, CC&N)

15 2008 – Three complaints (two billing, water quality)

16 2009 – Four complaints (billing, MXA and two CC&N)

17
18 All complaints have been resolved and closed.

19
20 **COMPLIANCE**

21 **Q. Please provide a summary of the compliance status of the Global Companies.**

22 A. A check of the Utilities Division Compliance Database indicates that there are currently
23 no delinquencies for the Global Companies.

SUMMARY OF PROPOSED REVENUES

Q. Please summarize the Global Companies' filings.

A. The Global Companies propose, in aggregate, \$34,159,948 of total annual operating revenue. This represents an increase of \$14,563,956, or 74.32 percent, over test year revenue of \$19,595,992. The amounts for each company are shown below.

Company Proposed	Test Year	Global Companies		
	Per Global Companies	Proposed Revenue	\$ Increase	% Increase
Palo Verde	\$ 6,521,201	\$ 15,014,581	\$ 8,493,380	130.24%
Santa Cruz	\$ 9,110,720	\$ 12,192,012	\$ 3,081,292	33.82%
Willow Valley	\$ 473,527	\$ 972,756	\$ 499,229	105.43%
Town Division	\$ 2,894,421	\$ 4,551,499	\$ 1,657,078	57.25%
Buckeye	\$ 336,819	\$ 492,619	\$ 155,800	46.26%
Tonopah	\$ 259,304	\$ 936,481	\$ 677,177	261.15%
Total / Overall	\$19,595,992	\$ 34,159,948	\$14,563,956	74.32%

Q. Please summarize Staff's recommended revenue.

A. Staff recommends an aggregate revenue requirement of \$28,708,258. This represents an increase of \$8,503,817, or 42.09 percent. The amounts for each system are shown below.

Staff Recommended	Test Year	Staff		
	Per Staff	Recommended	\$ Increase	% Increase
Palo Verde	\$ 6,643,813	\$12,088,712	\$ 5,444,899	81.95%
Santa Cruz	\$ 9,409,861	\$10,552,098	\$ 1,142,237	12.14%
Willow Valley	\$ 473,527	\$ 901,816	\$ 428,289	90.45%
Town Division	\$ 3,037,462	\$ 4,476,740	\$ 1,439,278	47.38%
Buckeye	\$ 380,474	\$ 452,732	\$ 72,258	18.99%
Tonopah	\$ 259,304	\$ 236,160	(\$ 23,144)	-8.93%
Total / Overall	\$20,204,441	\$28,708,258	\$ 8,503,817	42.09%

The above proposed and recommended revenue increases would apply to the customers of each of the Global Companies as discussed below:

1 *Palo Verde*

2 Palo Verde proposed an \$8,493,380, or 130.24 percent revenue increase from \$6,521,201
3 to \$15,014,581. The proposed revenue increase would produce an operating income of
4 \$5,307,395 for an 8.34 percent rate of return on an original cost rate base ("OCRB") of
5 \$63,637,830. Staff recommends a \$5,444,899 or 81.95 percent revenue increase from
6 \$6,643,813 to \$12,088,712. Staff's recommended revenue increase would produce an
7 operating income of \$4,438,060 for an 8.30 percent rate of return on an OCRB of
8 \$53,470,597.

9
10 *Santa Cruz*

11 Santa Cruz proposed a \$3,081,292, or 33.82 percent revenue increase from \$9,110,720 to
12 \$12,192,012. The proposed revenue increase would produce an operating income of
13 \$3,842,652 for an 8.49 percent rate of return on an OCRB of \$45,260,919. Staff
14 recommends a \$1,142,237 or 12.14 percent revenue increase from \$9,409,861 to
15 \$10,552,098. Staff's recommended revenue increase would produce an operating income
16 of \$3,328,234 for an 8.50 percent rate of return on an OCRB of \$39,155,692.

17
18 *Willow Valley*

19 Willow Valley proposed a \$499,229, or 105.43 percent revenue increase from \$473,527 to
20 \$972,756. The proposed revenue increase would produce an operating income of
21 \$208,008 for a 9.24 percent rate of return on an OCRB of \$2,251,164. Staff recommends
22 a \$428,289 or 90.45 percent revenue increase from \$473,527 to \$901,816. Staff's
23 recommended revenue increase would produce an operating income of \$184,595 for an
24 8.20 percent rate of return on an OCRB of \$2,251,164.

1 *Town Division*

2 Town Division proposed a \$1,657,078, or 57.25 percent revenue increase from \$2,894,421
3 to \$4,551,499. The proposed revenue increase would produce an operating income of
4 \$405,346 for a 9.56 percent rate of return on an OCRB of \$4,240,018. Staff recommends
5 a \$1,439,278 or 47.38 percent revenue increase from \$3,037,462 to \$4,476,740. Staff's
6 recommended revenue increase would produce an operating income of \$368,882 for an
7 8.70 percent rate of return on an OCRB of \$4,240,018.

8
9 *Buckeye*

10 Buckeye proposed a \$155,800, or 46.26 percent revenue increase from \$336,819 to
11 \$492,619. The proposed revenue increase would produce an operating income of \$90,304
12 for a 9.72 percent rate of return on an OCRB of \$929,057. Staff recommends a \$72,258 or
13 18.99 percent revenue increase from \$380,474 to \$452,732. Staff's recommended revenue
14 increase would produce an operating income of \$75,254 for an 8.10 percent rate of return
15 on an OCRB of \$929,057.

16
17 *Tonopah*

18 Tonopah proposed a \$677,177, or 261.15 percent, revenue increase from \$259,304 to
19 \$936,481. The proposed revenue increase would produce an operating income of
20 \$258,267 for a 9.94 percent rate of return on an OCRB of \$2,598,259. Staff recommends
21 a \$23,144 or 8.93 percent revenue decrease from \$259,304 to \$236,160. Staff's
22 recommended revenue decrease would produce an operating margin of 10.00 percent or
23 \$23,616. Staff's recommended OCRB is a negative \$6,123,255.

1 **Q. What test year did the Global Companies use in this filing?**

2 A. The Global Companies' rate filing is based on the twelve months ended December 31,
3 2008 ("test year").
4

5 **Q. Please summarize the rate base and operating income recommendations and**
6 **adjustments addressed in your testimony for the Global Companies.**

7 A. My testimony addresses the following issues:
8

9 Contributions in Aid of Construction ("CIAC") – This adjustment is made only to the rate
10 bases of Palo Verde, Santa Cruz, and Tonopah and increases CIAC by \$10,991,128,
11 \$6,600,076, \$9,022,750, respectively, to recognize as CIAC monies collected through
12 Infrastructure Coordination and Financing Agreements ("ICFAs").
13

14 Amortization of CIAC – This adjustment is made only to the rate bases of Palo Verde,
15 Santa Cruz, and Tonopah and increases Amortization of CIAC by \$823,895, \$494,849,
16 \$301,236, respectively, to reflect amortization of Staff's recommended CIAC additions.
17

18 Revenue and Expense Annualization – This adjustment is made only to the income
19 statements of Palo Verde, Santa Cruz, Town Division, and Buckeye and increases
20 operating income by \$113,096, \$281,210, \$118,166, and \$36,944, respectively, to remove
21 inappropriate revenue and expense annualizations.
22

23 Salaries, Wages, Pensions, and Benefits – This adjustment is made for all the Global
24 Companies and reclassifies costs from Salaries and Wages and Pensions and Benefits to
25 Contract Services-Management Fees as follows: \$1,140,645 for Palo Verde; \$971,034 for
26 Santa Cruz; \$277,334 for Willow Valley; \$813,888 for Town Division; \$92,381 for

1 Buckeye; and \$58,694 for Tonopah. All work performed for the Global Companies is
2 done through contract services, therefore, in accordance with the NARUC USOA, labor
3 costs incurred for management and operation should be reflected in the Contract Services-
4 Management Fees account. The adjustment has no net effect on operating income.

5
6 Materials and Supplies Account 620.08/720.08 – This adjustment is made for all the
7 Global Companies and decreases operating expenses to reflect materials and supplies at a
8 normalized level as follows: \$196,867 for Palo Verde; \$191,860 for Santa Cruz; \$21,759
9 for Willow Valley; \$69,726 for Town Division; \$10,466 for Buckeye; and \$6,059 for
10 Tonopah.

11
12 Contractual Services, Management Fees – This adjustment is made for all the Global
13 Companies and decreases operating expenses to reflect contract employee costs at a
14 normalized level and to remove costs that are not needed in the provision of service as
15 follows: \$28,621 for Palo Verde; \$38,353 for Santa Cruz; \$21,372 for Willow Valley;
16 \$61,633 for Town Division; \$7,832 for Buckeye; and \$5,070 for Tonopah.

17
18 Purchased Power – This adjustment is made only to the income statement of Tonopah and
19 decreases expenses by \$1,275 to remove the purchased pumping power costs related to
20 Tonopah's continuing high water loss.

21
22 Contractual Services, Water Testing – This adjustment is made only to the income
23 statement of Buckeye and reclassifies \$3,774 in water testing costs from Contractual
24 Services – Other to Contractual Services – Testing.

1 Bad Debt Expense – This adjustment is made for all the Global Companies and decreases
2 operating expenses to remove bad debt expense that was not actually incurred as follows:
3 \$6,919 for Palo Verde; \$49,147 for Santa Cruz; \$3,948 for Willow Valley; \$22,527 for
4 Town Division; \$2,214 for Buckeye; and \$1,729 for Tonopah.

5
6 Depreciation Expense – This adjustment is made only to the income statements of Palo
7 Verde, Santa Cruz, and Tonopah and decreases depreciation expense by \$823,895,
8 \$494,849, \$307,538, respectively, to reflect amortization of Staff's recommended CIAC
9 balance in Staff's calculation of depreciation expense.

10
11 Property Tax Expense – This adjustment is made for all the Global Companies and
12 increases operating expenses to reflect Staff's calculation of the property tax expense as
13 follows: \$480,259 for Palo Verde; \$674,421 for Santa Cruz; \$18,910 for Willow Valley;
14 \$143,236 for Town Division; \$17,015 for Buckeye; and \$8,989 for Tonopah.

15
16 Income Tax Expense – This adjustment is made for all the Global Companies and
17 decreases operating expenses to reflect the income tax obligation on Staff's adjusted test
18 year taxable income as follows: \$332,533 for Palo Verde; \$291,235 for Santa Cruz;
19 \$7,526 for Willow Valley; \$28,526 for Town Division; \$4,503 for Buckeye; and \$121,646
20 for Tonopah.

RATE BASE

Fair Value Rate Base

Q. Did the Global Companies prepare schedules showing the elements of Reconstruction Cost New Rate Base?

A. No, the Global Companies did not. The Global Companies requested that their original cost rate bases be treated as their fair value rate bases.

Rate Base Summary

Q. Please summarize Staff's adjustments to the Global Companies' rate bases shown on Schedules CSB-3 and CSB-4 of their respective schedules.

A. Staff made adjustments to only the rate bases of Palo Verde, Santa Cruz, and Tonopah to reflect Staff's recommended CIAC and amortization of CIAC balances. A summary of the Global Companies' proposed and Staff's recommended rate bases follow:

TEST YEAR RATE BASE			
	Per Company	Staff's Adjustment	Per Staff
Palo Verde	\$ 63,637,830	\$ (10,167,233)	\$53,470,597
Santa Cruz	\$ 45,260,919	\$ (6,105,227)	\$39,155,692
Willow Valley	\$ 2,251,164	\$ 0	\$ 2,251,164
Town Division	\$ 4,240,018	\$ 0	\$ 4,240,018
Buckeye	\$ 929,057	\$ 0	\$ 929,057
Tonopah	\$ 2,598,259	\$ (8,721,514)	\$(6,123,255)
Total	\$118,917,247	\$(24,993,974)	\$93,923,273

Rate Base Adjustment – Contributions In Aid of Construction ("CIAC")

Q. What amount of CIAC did the Global Companies include in rate base?

A. The Global Companies included no CIAC for Palo Verde, Santa Cruz, and Willow Valley. It included \$890,221, \$407,979, and \$73,118 for Town Division, Buckeye, and Tonopah, respectively.

1 **Q. Did Staff identify additional CIAC that should be included in the rate bases of Palo**
2 **Verde, Santa Cruz, and Tonopah?**

3 A. Yes. Staff identified additional CIAC (i.e., monies collected though ICFAs) that should
4 be included in the rate bases of Palo Verde, Santa Cruz, and Tonopah as discussed in
5 greater detail in Staff witness Linda Jaress' direct testimony.

6
7 **Q. What is Staff's recommendation?**

8 A. As shown on Schedules CSB-3 and CSB-4 of the respective Global Companies, Staff
9 recommends increasing the CIAC balances for Palo Verde, Santa Cruz and Tonopah as
10 follows:

11

		Gross CIAC	Staff's	Gross CIAC
	Reference:	Per Company	Adjustment	Per Staff
Palo Verde	Schedules CSB-3 & CSB-4	\$ 0	\$ 10,991,128	\$ 10,991,128
Santa Cruz	Schedules CSB-3 & CSB-4	\$ 0	\$ 6,600,076	\$ 6,600,076
Willow Valley	Schedules CSB-3 & CSB-4	\$ 0	\$ 0	\$ 0
Town Division	Schedules CSB-3 & CSB-4	\$ 890,221	\$ 0	\$ 890,221
Buckeye	Schedules CSB-3 & CSB-4	\$ 407,979	\$ 0	\$ 407,979
Tonopah	Schedules CSB-3 & CSB-4	\$ 73,118	\$ 9,022,750	\$ 9,095,868

12
13 **Rate Base Adjustment – Amortization of CIAC**

14 **Q. What adjustment did Staff make to the Global Companies' amortization of CIAC**
15 **balances?**

16 A. Consistent with Staff's recommendation to include additional CIAC in the rate bases of
17 Palo Verde, Santa Cruz, and Tonopah, Staff also recommends increasing the amortization
18 of CIAC balances to include amortization of the additional CIAC.

Q. What is Staff's recommendation?

A. As shown on Schedules CSB-3 and CSB-4 of the respective Global Companies, Staff recommends increasing the amortization of CIAC balances for Palo Verde, Santa Cruz and Tonopah as follows:

	Reference:	Amortization of CIAC Per Company	Staff's Adjustment	Amortization of CIAC Per Staff
Palo Verde	Schedules CSB-3 & CSB-4	\$ 0	\$ 823,895	\$ 823,895
Santa Cruz	Schedules CSB-3 & CSB-4	\$ 0	\$ 494,849	\$ 494,849
Willow Valley	Schedules CSB-3 & CSB-4	\$ 0	\$ 0	\$ 0
Town Division	Schedules CSB-3 & CSB-4	\$ 98,283	\$ 0	\$ 98,283
Buckeye	Schedules CSB-3 & CSB-4	\$ 71,396	\$ 0	\$ 71,396
Tonopah	Schedules CSB-3 & CSB-4	\$ 8,130	\$ 301,236	\$ 309,366

Operating Income

Operating Income Summary

Q. What are the results of Staff's analysis of test year revenues, expenses and operating income for the Global Companies?

A. Staff's analysis resulted in test year revenues, expenses, and operating income as follows:

TEST YEAR REVENUES, EXPENSE, & OPERATING INCOME						
	Palo Verde	Santa Cruz	Willow Valley	Town Division	Buckeye	Tonopah
	Sch CSB-7	Sch CSB-7	Sch CSB-5	Sch CSB-5	Sch CSB-5	Sch CSB-7
Revenues	\$6,643,813	\$9,409,861	\$473,527	\$3,037,462	\$380,474	\$259,304
Expenses	\$5,477,625	\$6,768,004	\$548,343	\$3,539,116	\$348,938	\$221,638
Operating Income	\$1,166,188	\$2,641,857	(\$74,816)	(\$501,654)	(\$31,536)	\$37,666

Operating Income Adjustment – Revenue and Expense Annualization

Q. What Revenue and Expense Annualization adjustments did the Global Companies propose?

A. The Global Companies proposed revenue and expense annualization adjustments to decrease test year revenues, purchased pumping power expense, and chemicals expense

1 based upon year-end customer counts that were lower than the annual average number of
2 customers.

3
4 **Q. Does Staff agree that all of the revenue and expense annualization adjustments**
5 **proposed for the Global Companies are appropriate?**

6 A. No, Staff does not. Staff compared the number of customers used in the annualization
7 adjustment to the number of customers as of July 31, 2009, and found that the customer
8 counts had increased significantly for Palo Verde, Santa Cruz, Town Division, and
9 Buckeye. Therefore, Staff removed the annualization adjustments to reflect actual test
10 year revenues, purchased pumping power expense, and chemicals expense. The actual test
11 year revenues and expenses provide a more realistic relationship between customer
12 counts, revenues, operating expenses, and rate base.

13
14 **Q. What is Staff's recommendation?**

15 A. Staff recommends increasing operating income to reverse the net annualization
16 adjustments for Palo Verde, Santa Cruz, Town Division, and Buckeye as follows:

17

	Reference	Operating Income Increase Due to Reversal of Annualization Adjustment
Palo Verde	Schedules CSB-8 & CSB-9	\$ 113,096
Santa Cruz	Schedules CSB-8 & CSB-9	\$ 281,210
Willow Valley	Schedule CSB-6	\$ 0
Town Division	Schedules CSB-6 & CSB-7	\$ 118,166
Buckeye	Schedules CSB-6 & CSB-7	\$ 36,944
Tonopah	Schedule CSB-8	\$ 0

Operating Income Adjustment – Salaries, Wages, Pensions, and Benefits

Q. Did the Global Companies report costs for individuals that are directly employed by an affiliate as employee costs for the Global Companies?

A. Yes, the Global Companies reported as employee payroll expenses costs incurred for individuals who are directly employed by the affiliate, Global Water Incorporated ("GWI").

Q. Do the Global Companies have employees?

A. No, the Global Companies contract all of their personnel for day to day operations through the affiliate, GWI.

Q. Should contract employees' payroll costs be recorded as salaries and wages?

A. No, they should not. The NARUC USOA, which is the accounting system prescribed by the Arizona Administrative code (R14-2-411. D. 2), requires that contract employees' costs incurred for management and operation be recorded in Account No. 634, Contractual Services - Management Fees.

Q. What is Staff's recommendation?

A. Staff recommends reclassifying costs from Salaries and Wages and Pensions and Benefits to Contract Services-Management Fees for all Global Companies as follows:

	Reference	Reclassify Expenses from Salaries, Wages, Pensions & Benefits to <u>Contractual Services Management Fees</u>
Palo Verde	Schedules CSB-8 & CSB-10	\$ 1,140,645
Santa Cruz	Schedules CSB-8 & CSB-10	\$ 971,034
Willow Valley	Schedules CSB-6 & CSB-7	\$ 277,334
Town Division	Schedules CSB-6 & CSB-8	\$ 813,888
Buckeye	Schedules CSB-6 & CSB-8	\$ 92,381
Tonopah	Schedules CSB-8 & CSB-9	\$ 58,694

Operating Income Adjustment – Materials and Supplies, Acct. Nos. 620.08 and 720.08

Q. What amount of Material and Supplies did the Global Companies report for the years 2006, 2007, 2008?

A. As shown on Schedule E-2 of the respective Global Companies' applications, the Companies reported the following materials and supplies (account numbers 620.08 or 720.08) for the years 2006, 2007, and 2008:

MATERIAL AND SUPPLIES EXPENSE, ACCT NOS. 620.08 & 720.08						
	Palo Verde	Santa Cruz	Willow Valley	Town Division	Buckeye	Tonopah
	Sch E-7	Sch E-7	Sch E-7	Sch E-7	Sch E-7	Sch E-7
2006	\$ 0	\$ 18,487	\$ 17,706	\$ 48,296	\$ 1,704	\$ 2,379
2007	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2008	\$ 295,301	\$ 297,033	\$ 41,492	\$ 128,737	\$ 16,551	\$ 10,278

Q. For comparative purposes, do the Global Companies know the actual amount of expenses for the years 2006 and 2007 that are comparable to the 2008 expense?

A. No, they do not. The Companies stated in response to data request CSB 15-1, that the allocation methodology changed on January 1, 2008.

Q. If the amounts reported for the years 2006 and 2007 represent normal costs for these years, what would this indicate to Staff?

A. The wide fluctuations from year to year would indicate large projects or costs that were incurred in some years but not in others.

Q. How does including abnormally high costs in operating expenses harm customers?

A. It harms customers because, on average, the rates would be over-stated as the Companies would not be incurring the abnormally high level of materials and supplies expense each year.

1 **Q. For ratemaking purposes, how did Staff treat the amounts reported for the years**
2 **2006 and 2007?**

3 A. For ratemaking purposes, Staff treated the expenses reported for the years 2006 and 2007
4 as comparable amounts to the 2008 amount and normalized the amounts by averaging the
5 total over three years.

6
7 **Q. Did Staff attempt to review the test year invoices for this account?**

8 A. Yes. Staff sent a data request for all test year invoices for the materials and supplies
9 expenses for account nos. 620.08 and 720.08 on May 2, 2009. Unfortunately, the
10 Companies did not provide the requested information until September 22, 2009, which did
11 not afford Staff sufficient time to audit the documents and incorporate the findings in
12 direct testimony.

13
14 **Q. Will Staff review the invoices and make adjustments as appropriate in its**
15 **Surrebuttal testimony?**

16 A. Yes.

17
18 **Q. What is Staff's recommendation?**

19 A. At this time, Staff recommends decreasing Materials and Supplies expenses, Account Nos.
20 620.08 and 720.08 for all Global Companies as follows:

21

	Reference	Materials & Supplies Expense Account Nos. 620.08 & 720.08 Adjustment
Palo Verde	Schedules CSB-8 & CSB-11	\$ 196,867
Santa Cruz	Schedules CSB-8 & CSB-11	\$ 191,860
Willow Valley	Schedules CSB-6 & CSB-8	\$ 21,759
Town Division	Schedules CSB-6 & CSB-9	\$ 69,726
Buckeye	Schedules CSB-6 & CSB-9	\$ 10,466
Tonopah	Schedules CSB-8 & CSB-10	\$ 6,059

Operating Income Adjustment – Contractual Services, Management Fees

Q. Did Staff adjust the Contractual Services, Management Fees account?

A. Yes.

Q. What adjustments did Staff make?

A. Staff removed contract employee bonuses and contract employee kitchen supplies cost.

Staff also reviewed the costs incurred for contract employee hiring and moving costs, contract employee training and certification costs, contract employee travel and contract employee meals costs and found that these types of costs would not typically be incurred at the same level each year. Therefore, Staff normalized these costs by dividing the total of these expenses by 2 years.

Q. What is Staff's recommendation?

A. Staff recommends decreasing Contractual Services, Management Fees expense for all Global Companies as follows:

	Reference	Contractual Services, Management Fees Adjustment
Palo Verde	Schedules CSB-8 & CSB-12	\$ 28,621
Santa Cruz	Schedules CSB-8 & CSB-9	\$ 38,353
Willow Valley	Schedules CSB-6 & CSB-9	\$ 21,372
Town Division	Schedules CSB-6 & CSB-10	\$ 61,633
Buckeye	Schedules CSB-6 & CSB-10	\$ 7,832
Tonopah	Schedules CSB-8 & CSB-11	\$ 5,070

Automatic Meter Readers

Q. Which Global Companies have automatic readers and when were they installed?

A. The companies that have automatic meter readers and the year they were installed are as follows:

COMPANIES WITH AUTOMATIC METER READERS	
	Year(s) Installed
Santa Cruz	2005 - 2008
Town Division	2008
Buckeye	2008 - 2009
Tonopah	2008

Q. Could the use of automatic meter readers have an impact on test year labor and transportation costs?

A. Yes, the use of automatic meter readers could eliminate some labor and transportation costs that would otherwise be needed to read the meters, resulting in a net decrease of labor and transportation costs allocated to these companies.

Q. Has Staff determined whether or not this has occurred?

A. No. Staff is currently reviewing the documentation related to automatic meter readers and other information that was provided by the Companies. That analysis is not yet complete.

Q. Will Staff complete its analysis and make adjustments as appropriate in its Surrebuttal testimony?

A. Yes.

Operating Income Adjustment – Purchased Power

Q. What amount did Tonopah propose for purchased power expense?

A. Tonopah proposed \$16,192.

Q. Did Staff adjust purchased power for Tonopah?

A. Yes.

Q. Why did Staff adjust purchased power?

A. Tonopah has water loss greater than that recommended by Staff, as discussed in greater detail by Staff witness, Jian Liu. This problem has continued since the last rate case (Decision No. 62092, dated November 19, 1999). The cost of the purchased power used to pump the water that is lost does not provide a benefit to customers; consequently Staff reduced the purchased power to correspond to the portion of the water loss that is above Staff's recommended level of 10 percent.

Q. What is Staff's recommendation?

A. Staff recommends decreasing purchased power by \$1,275 for Tonopah only. The adjustment is shown on Schedules CSB-8 and CSB-12.

Operating Income Adjustment – Contractual Services, Water Testing

Q. What amount did Buckeye propose for water testing expense?

A. Buckeye proposed no water testing expense.

1 **Q. Was this omission an oversight by Buckeye?**

2 A. Yes. Staff reviewed Buckeye's general ledger and found that these costs were
3 inadvertently recorded in Contractual Services-Other rather than Contractual Services-
4 Testing.

5
6 **Q. What is Staff's recommendation?**

7 A. Staff recommends reclassifying \$3,774 in water testing costs from the Contractual
8 Services-Other account to the Contractual Services-Testing account for Buckeye only.
9 The adjustment is shown on Schedules CSB-6 and CSB-11.

10

11 **Operating Income Adjustment – Bad Debt Expense**

12 **Q. Did the Global Companies include a provision for bad debt in the test year expenses?**

13 A. Yes, the Global Companies included \$65,212, \$91,107, \$4,735, \$28,944, \$3,368, and
14 \$2,593 for bad debt expense for Palo Verde, Santa Cruz, Willow Valley, Town Division,
15 Buckeye and Tonopah, respectively.

16

17 **Q. What was the actual Bad Debt Expense for the Global Companies during the test**
18 **year?**

19 A. The actual bad debt expense incurred during the test year was \$58,293, \$41,960, \$787,
20 \$6,417, \$1,154, and \$864 for Palo Verde, Santa Cruz, Willow Valley, Town Division,
21 Buckeye and Tonopah, respectively.

22

23 **Q. What effect does recognizing the Companies' proposed Bad Debt Expense have on**
24 **the revenue requirement?**

25 A. It increases the revenue requirement and allows recovery of an expense the Companies did
26 not experience in the test year.

1 **Q. What is Staff's recommendation?**

2 A. Staff recommends decreasing Bad Debt expense to the amount incurred in the test year for
3 all the Global Companies as follows:
4

	Reference	Bad Debt Expense Adjustment
Palo Verde	Schedules CSB-8 & CSB-13	\$ 6,919
Santa Cruz	Schedules CSB-8 & CSB-13	\$ 49,147
Willow Valley	Schedules CSB-6 & CSB-10	\$ 3,948
Town Division	Schedules CSB-6 & CSB-11	\$ 22,527
Buckeye	Schedules CSB-6 & CSB-12	\$ 2,214
Tonopah	Schedules CSB-8 & CSB-13	\$ 1,729

5
6 **Operating Income Adjustment – Depreciation Expense**

7 **Q. What are Palo Verde, Santa Cruz, and Tonopah proposing for depreciation expense?**

8 A. Palo Verde, Santa Cruz, and Tonopah are proposing depreciation expense of \$3,156,675,
9 \$3,506,485, and \$307,538, respectively.
10

11 **Q. What adjustment did Staff make to depreciation expense?**

12 A. Staff adjusted depreciation expense to reflect application of the Staff-recommended
13 amortization CIAC balance in its depreciation expense calculation.

Q. What is Staff's recommendation?

A. Staff recommends decreasing depreciation expense for Palo Verde, Santa Cruz and Tonopah as follows:

	Reference:	Depreciation Expense Per Company	Staff's Adjustment	Depreciation Expense Per Staff
Palo Verde	Schedules CSB-8 & CSB-14	\$ 3,156,675	\$ (823,895)	\$ 2,332,780
Santa Cruz	Schedules CSB-8 & CSB-14	\$ 3,506,485	\$ (494,849)	\$ 3,011,636
Willow Valley	Schedule CSB-6	\$ 185,697	\$ 0	\$ 185,697
Town Division	Schedule CSB-6	\$ 2,199,986	\$ 0	\$ 2,199,986
Buckeye	Schedule CSB-6	\$ 113,580	\$ 0	\$ 113,580
Tonopah	Schedules CSB-8 & CSB-14	\$ 307,538	\$ (307,538)	\$ 0

Operating Income Adjustment – Property Taxes

Q. What is the Companies' proposal regarding property tax expense?

A. The Companies propose that property taxes be treated as a pass-through tax and be removed from test-year expenses. The Companies propose that a tax rate be calculated and applied to the customer's bill, and that any over- or under-collections be applied to the subsequent year's calculation.

Q. What is the basis for the Global Companies' position?

A. The Global Companies assert that property taxes qualify as a pass-through because they are based on water sales or gross revenues. The Companies further state that property taxes have become increasingly volatile and are outside of the Companies' control.

Q. Does Staff believe that property tax can appropriately be classified as a pass-through tax?

A. No. A true pass-through tax, like sales tax, for example, is one which is known and measurable and easily calculated and assigned. Property tax, on the other hand, is not

1 based directly on only sales or revenue or any one factor. As described by the Global
2 Companies in direct testimony, property tax is computed using several formulas involving
3 multiple variables, of which average gross revenue is only one. Additionally, the Global
4 Companies' proposed tax rate would be based on the property tax calculation and
5 *estimated* revenues. The resulting customer charge clearly cannot be described as known
6 and measurable or directly based on revenues or sales, as is further demonstrated by an
7 anticipated over- or under-collection.
8

9 **Q. How would Staff characterize the Global Companies' proposal?**

10 A. Staff would classify the Global Companies' proposed treatment as an adjustor mechanism.
11

12 **Q. Does Staff support the recovery of property tax expense through an adjustor**
13 **mechanism?**

14 A. No. An adjustor is generally used when a particular expense represents a significantly
15 large percentage of total operating expenses and is highly volatile and out of the
16 Companies' control. In the instant case, the property tax amount does not represent a
17 significant portion of Staff's total recommended expenses. Also, as described in the
18 Companies' direct testimony, the property valuation is determined on an annual basis and
19 the property tax calculation uses a three-year average of gross revenues. Staff therefore
20 does not consider this tax to be highly volatile, as it does not have the tendency to vary
21 widely or to be subject to sudden changes.
22

23 **Q. What treatment does Staff recommend for property taxes?**

24 A. Staff believes property taxes should be treated as a cost of doing business and included in
25 operating expenses, as has been the Commission's long standing practice.

1 **Q. Did Staff make an adjustment to property tax expense?**

2 A. Yes. Staff recommends property taxes for all Global Companies as follows:

3

	Reference:	Property Tax Expense Per Company	Staff's Adjustment	Property Tax Expense Per Staff
Palo Verde	Schedules CSB-8 & CSB-15	\$ 0	\$ 480,259	\$ 480,259
Santa Cruz	Schedules CSB-8 & CSB-15	\$ 0	\$ 674,421	\$ 674,421
Willow Valley	Schedules CSB-6 & CSB-11	\$ 0	\$ 18,910	\$ 18,910
Town Division	Schedules CSB-6 & CSB-12	\$ 0	\$ 143,236	\$ 143,236
Buckeye	Schedules CSB-6 & CSB-13	\$ 0	\$ 17,015	\$ 17,015
Tonopah	Schedules CSB-8 & CSB-11	\$ 0	\$ 8,989	\$ 8,989

4
5 **Operating Income Adjustment – Income Taxes**

6 **Q. What are the Companies proposing for test year Income Tax Expense?**

7 A. The Global Companies are proposing income tax expense of \$90,848, \$1,238,174,
8 negative \$72,955, negative \$402,522, negative \$5,703, and negative \$97,968 for Palo
9 Verde, Santa Cruz, Willow Valley, Town Division, Buckeye and Tonopah, respectively.

10
11 **Q. Did Staff make any adjustments to test year Income Tax Expense?**

12 A. Yes. Staff's adjustment reflects Staff's calculation of the income tax expense based upon
13 Staff's adjusted test year taxable income.

14
15 **Q. What is Staff's recommendation?**

16 A. Staff recommends adjusting the test year Income Tax Expense for the Global Companies
17 as follows:

	Reference:	Income Tax Expense <u>Per Company</u>	Staff's <u>Adjustment</u>	Income Tax Expense <u>Per Staff</u>
Palo Verde	Schedules CSB-8 & CSB-16	\$90,848	(\$332,533)	(\$241,685)
Santa Cruz	Schedules CSB-8 & CSB-16	\$1,238,174	(\$291,235)	\$946,939
Willow Valley	Schedules CSB-6 & CSB-12	(\$72,955)	\$7,526	(\$65,429)
Town Division	Schedules CSB-6 & CSB-13	(\$402,522)	\$28,526	(\$373,996)
Buckeye	Schedules CSB-6 & CSB-14	(\$5,703)	\$4,503	(\$1,200)
Tonopah	Schedules CSB-8 & CSB-12	(\$97,968)	\$121,646	\$23,678

Rate Consolidation

Q. Did Staff review the Global Companies' proposal to consolidate rates for Town Division, Buckeye, and Tonopah?

A. Yes. Staff reviewed the rate consolidation proposal.

Q. Did Staff prepare a schedule showing the individual and consolidated revenue requirements, rate bases, and operating income statements for Town Division, Buckeye and Tonopah?

A. Yes, see Schedules CSB-1 through CSB-5 for the consolidated systems.

Q. What is the Global Companies' primary reason for consolidating rates?

A. The primary reason, according to the Companies' filing, is that Tonopah customers would experience "an extremely large rate increase" (Rowell Direct Testimony, page 3, line 24). Tonopah proposes a revenue increase of \$677,177, or 261.15 percent, from \$259,304 to \$936,481.

1 **Q. What are the individual percentage revenue increase or decrease and customer**
2 **counts for Town Division, Buckeye, and Tonopah under Staff's recommendation?**

3 A. As shown on Schedule CSB-1 of the consolidated schedules, the individual percent
4 increase or decrease of Town Division, Buckeye and Tonopah and customer counts are as
5 follows:

	Staff Recommended Total Revenue	Staff Recommended \$ Increase	Staff Recommended % Increase Under Stand Alone	Staff Recommended % Increase Under Consolidated	Number of Customers
Town Division	\$ 4,490,760	\$1,439,278	47.38%	45.72%	5,024
Buckeye	\$ 452,732	\$ 72,258	18.99%	45.72%	620
Tonopah	\$ 236,160	(\$ 23,144)	-8.93%	45.72%	346

7
8 **Q. How would rate consolidation impact the customers of Buckeye, Tonopah and Town**
9 **Division under Staff's recommended revenue?**

10 A. The Buckeye and Tonopah customers would be required to subsidize Town Division, a
11 much larger company, as shown on the table above and Schedule CSB-1 of the
12 consolidated schedules. Under Staff's recommendations, consolidation would result in
13 Buckeye and Town Division customers experiencing a significantly higher increase than
14 they would have on a stand-alone basis, while the Town Division customers would see
15 only a slight decrease.

16
17 **Q. Does Staff recommend approval of the Global Companies' rate consolidation**
18 **proposal?**

19 A. No. Staff recommends that the Commission establish individual rates for Town Division,
20 Buckeye and Tonopah. Rate consolidation always results in some cross-subsidization
21 among systems. A benefit of that subsidization can be that spreading costs among the
22 customers of larger systems helps to mitigate a significant rate impact to customers of

1 smaller systems. In this instance, just the opposite outcome occurs, resulting in an unfair
2 burden on the smaller systems. Staff does not find any significant benefit resulting from
3 the Companies' rate consolidation proposal that would outweigh the detrimental effect of
4 the proposed rate consolidation on the Buckeye and Town Division customers. However,
5 Staff witness Darak Eaddy will continue to analyze rate consolidation. If Staff believes
6 some other form of rate consolidation is appropriate, it will be presented in Mr. Eaddy's
7 testimony.

8
9 **Q. Does this conclude your direct testimony?**

10 **A. Yes, it does.**

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	[A] COMPANY ORIGINAL COST	[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	\$ 63,637,830	\$ 53,470,597
2	Adjusted Operating Income (Loss)	\$ 144,516	\$ 1,166,188
3	Current Rate of Return (L2 / L1)	0.23%	2.18%
4	Required Rate of Return	8.34%	8.30%
5	Required Operating Income (L4 * L1)	\$ 5,307,395	\$ 4,438,060
6	Operating Income Deficiency (L5 - L2)	\$ 5,162,879	\$ 3,271,872
7	Gross Revenue Conversion Factor	1.64509	1.66415
8	Increase (Decrease) In Gross Revenue (L7 * L6)	\$ 8,493,380	\$ 5,444,899
9	Adjusted Test Year Revenue	\$ 6,521,201	\$ 6,643,813
10	Proposed Annual Revenue (L8 + L9)	\$ 15,014,581	\$ 12,088,712
11	Required Increase/(Decrease in Revenue) (%) (L8/L9)	130.24%	81.95%

References:

Column [A]: Company Schedules A-1, C-1, C-3, & D-1
Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-7

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
<u>Calculation of Gross Revenue Conversion Factor:</u>					
1	Revenue	100.0000%			
2	Uncollectible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.9094%			
5	Subtotal (L3 - L4)	60.0906%			
6	Revenue Conversion Factor (L1 / L5)	1.664154			
<u>Calculation of Uncollectible Factor:</u>					
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	38.5989%			
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0.0000%			
<u>Calculation of Effective Tax Rate:</u>					
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.9680%			
14	Federal Taxable Income (L12 - L13)	93.0320%			
15	Applicable Federal Income Tax Rate (Line 53)	34.0000%			
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%			
17	Combined Federal and State Income Tax Rate (L13 + L16)		38.5989%		
<u>Calculation of Effective Property Tax Factor</u>					
18	Unity	100.0000%			
19	Combined Federal and State Income Tax Rate (L17)	38.5989%			
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%			
21	Property Tax Factor (CSB-15, Col. B, L 24)	2.1344%			
22	Effective Property Tax Factor (L20*L21)		1.3105%		
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.9094%	
24	Required Operating Income (Schedule CSB-1, Line 5)	\$ 4,438,060			
25	Adjusted Test Year Operating Income (Loss) (Sch CSB-7, Col C, L 33)	1,166,188			
26	Required Increase in Operating Income (L24 - L25)		\$ 3,271,872		
27	Income Taxes on Recommended Revenue (Col. [C], L52)	\$ 1,815,128			
28	Income Taxes on Test Year Revenue (Col. [B], L52)	(241,685)			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		2,056,812		
30	Recommended Revenue Requirement (Schedule CSB-1, Line 10)	\$ 12,088,712			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L30*L31)	\$ -			
33	Adjusted Test Year Uncollectible Expense	\$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)		-		
35	Property Tax with Recommended Revenue (CSB-15, Col B, L19)	\$ 596,474			
36	Property Tax on Test Year Revenue (CSB-15, Col A, L16)	480,259			
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		116,215		
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)		\$ 5,444,899		
<u>Calculation of Income Tax:</u>					
		Test Year		Staff Recommended	
39	Revenue (Schedule CSB-11, Col. [C], Line 5 & Sch. CSB-1, Col. [D] Line 5)	\$ 6,643,813	\$ 5,444,899	\$12,088,712	
40	Operating Expenses Excluding Income Taxes	\$ 5,719,310	\$ 116,215	\$ 5,835,525	
41	Synchronized Interest (L56)	\$ 1,550,647		\$ 1,550,647	
42	Arizona Taxable Income (L39 - L40 - L41)	\$ (626,144)		\$ 4,702,540	
43	Arizona State Income Tax Rate	6.9680%		6.9680%	
44	Arizona Income Tax (L42 x L43)	\$ (43,630)		\$ 327,673	
45	Federal Taxable Income (L42 - L44)	\$ (582,514)		\$ 4,374,867	
46	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
47	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
48	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
49	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
50	Federal Tax on All Income (\$0 -\$10,000,000) @ 34%	\$ (198,055)		\$ 1,487,455	
51	Total Federal Income Tax	\$ (198,055)		\$ 1,487,455	
52	Combined Federal and State Income Tax (L44 + L51)	\$ (241,685)		\$ 1,815,128	
53	Applicable Federal Income Tax Rate [Col. [C], L51 - Col. [A], L51] / [Col. [C], L45 - Col. [A], L45]			34.0000%	
<u>Calculation of Interest Synchronization:</u>					
54	Rate Base (Schedule CSB-3, Col. (C), Line 14)	\$ 53,470,597			
55	Weighted Average Cost of Debt	2.9000%			
56	Synchronized Interest (L45 X L46)	\$ 1,550,647			

RATE BASE - ORIGINAL COST

LINE NO.	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	ADJ NO.	(C) STAFF AS ADJUSTED
1	Plant in Service	\$ 100,264,747		\$ 100,264,747
2	Less: Accumulated Depreciation	(9,082,530)		(9,082,530)
3	Net Plant in Service	<u>\$ 91,182,217</u>		<u>\$ 91,182,217</u>
<u>LESS:</u>				
4	Advances in Aid of Construction (AIAC)	\$ 27,370,552		\$ 27,370,552
5	Service Line and Meter Advances	\$ -		\$ -
6	Contributions in Aid of Construction (CIAC)	\$ -	1	\$ 10,991,128
7	Less: Accumulated Amortization	-	2	823,895
8	Net CIAC	<u>\$ -</u>		<u>\$ 10,167,233</u>
9	Total Advances and Contributions	\$ 27,370,552		\$ 37,537,785
10	Customer Deposits	\$ 173,835		\$ 173,835
11	Accumulated Deferred Income Taxes	\$ -		\$ -
<u>ADD:</u>				
12	Deferred Tax Asset	\$ -		\$ -
13	Working Capital	\$ -		\$ -
14	Total Rate Base	<u>\$ 63,637,830</u>		<u>\$ 53,470,597</u>

References:

Column [A], Company Schedule B-1, Page 1
Column [B]: Schedule CSB-4
Column [C]: Column [A] + Column [B]

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.		[A]	[B]	[C]	[D]
	<u>PLANT IN SERVICE</u>		<u>Adj No. 1</u>	<u>ADJ No. 2</u>	
	Acct.	COMPANY	CIAC	Accumulated Amort of CIAC	STAFF AS
	No. Plant Description	AS FILED	Ref. Sch CSB-5	Ref. Sch CSB-6	ADJUSTED
1					
2	353 Land and Land Rights	\$ 186,009	\$ -	\$ -	\$ 186,009
3	354 Structures and Improvements	16,520,426	-	-	16,520,426
4	355 Power Generation Equipment	321,425	-	-	321,425
5	360 Collection Sewers - Force	3,857,656	-	-	3,857,656
6	361 Collection Sewers - Gravity	47,344,470	-	-	47,344,470
7	363 Services to Customers	5,205,784	-	-	5,205,784
8	364 Flow Measuring Devices	23,636	-	-	23,636
9	370 Receiving Wells	1,940,450	-	-	1,940,450
10	371 Pumping Equipment	3,878,776	-	-	3,878,776
11	374 Reuse Distribution Reservoirs	11,043	-	-	11,043
12	375 Reuse Transmission & Distribution System	10,912,763	-	-	10,912,763
13	380 Treatment and Disposal Equipment	5,440,808	-	-	5,440,808
14	381 Plant Sewers	78,384	-	-	78,384
15	382 Outfall Sewers	353,645	-	-	353,645
16	389 Other Plant and Miscellaneous Equipment	2,271,644	-	-	2,271,644
17	390 Office Furniture and Equipment	138,995	-	-	138,995
18	391 Transportation Equipment	165,404	-	-	165,404
19	393 Tools, Shop, and Garage Equipment	100,819	-	-	100,819
20	394 Laboratory Equipment	36,073	-	-	36,073
21	395 Power Operated Equipment	10,320	-	-	10,320
22	396 Communication Equipment	38,289	-	-	38,289
23	397 Miscellaneous Equipment	359,170	-	-	359,170
24	398 Other Tangible Equipment	1,068,758	-	-	1,068,758
25	Total Plant in Service - Actual	\$ 100,264,747	\$ -	\$ -	\$ 100,264,747
26	Less: Accumulated Depreciation	\$ (9,082,530)	\$ -	\$ -	(9,082,530)
27	Net Plant in Service	\$ 91,182,217	\$ -	\$ -	\$ 91,182,217
28					
29	<u>LESS:</u>				
30	Advances in Aid of Construction (AIAC)	\$ 27,370,552	\$ -	\$ -	\$ 27,370,552
31	Service Line and Meter Advances	\$ -	-	-	\$ -
32					
33	Contributions in Aid of Construction (CIAC)	\$ -	-	-	\$ -
34	CIAC/ICFAS - Plant	-	10,991,128	-	10,991,128
35	CIAC/ICFAS - Other	-	-	-	-
36	Total CIAC - Adjusted	\$ -	\$ 10,991,128	\$ -	\$ 10,991,128
37					
38	Less: Accumulated Amortization of CIAC	\$ -	-	-	\$ -
39	Accum Amort of CIAC / ICFAs - Plant	-	-	823,895	823,895
40	Total Accumulated Amortization of CIAC	\$ -	\$ -	\$ 823,895	\$ 823,895
41					
42	Net CIAC	\$ -	10,991,128	(823,895)	\$ 10,167,233
43					
44	Total Advances and Net Contributions	\$ 27,370,552	\$ 10,991,128	\$ (823,895)	\$ 37,537,785
45					
46	Customer Deposits	\$ 173,835	-	-	\$ 173,835
47	Accumulated Deferred Taxes	\$ -	-	-	\$ -
48					
49	<u>ADD:</u>				
50	Deferred Tax Asset	\$ -	-	-	\$ -
51	Working Capital Allowance	\$ -	-	-	\$ -
52	Total Rate Base	\$ 63,637,830	\$ (10,991,128)	\$ 823,895	\$ 53,470,597

Global Water - Palo Verde Utilities Company
Docket No. SW-20445A-09-0077
Test Year Ended December 31, 2008

Schedule CSB-5

RATE BASE ADJUSTMENT NO. 1 - CONTRIBUTION IN AID OF CONSTRUCTION, ICFAS

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	CIAC/ICFAS - Plant	\$ -	10,991,128	\$ 10,991,128

References:

Column [A]: Company Schedule B-2
Column [B]: Testimony, CSB
Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 2 - ACCUMULATED AMORTIZATION OF CIAC/ ICFA

LINE NO.	DESCRIPTION			
		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Accumulated Amortization of CIAC/ICFA	\$ -	\$ 823,895	\$ 823,895
2				
3				
4				
5				
6	2004 Beginning CIAC/ICFA Balance	\$ -		
7	CIAC/ICFA Amort Rate		2.83% From Page 2, Line 18, Col F	
8	2004 Amort on Beginning Balance		-	
9				
10	2004 CIAC/ICFA Addition	\$ 2,198,226	\$10,991,128 / 5 years	
11	CIAC/ICFA Amort Rate (Half Year Convention)		1.41% From Page 2, Line 18, Col F, divided by 2	
12	2004 Amort on CIAC/ICFA Addition		30,995	
13				
14	2004 Ending Accu Amort of CIAC Balance	\$ 30,995	Line 8 + Line 12	
15				
16	2005 Beginning CIAC/ICFA Balance	\$ 2,198,226	Line 8 + Line 10	
17	CIAC/ICFA Amort Rate		2.88% From Page 2, Line 19, Col F	
18	2005 Amort on Beginning Balance		63,309	
19				
20	2005 CIAC/ICFA Addition	\$ 2,198,226	\$10,991,128 / 5 years	
21	CIAC/ICFA Amort Rate (Half Year Convention)		1.44% From Page 2, Line 19, Col F, divided by 2	
22	2005 Amort on CIAC/ICFA Addition		31,654	
23				
24	2005 Ending Accu Amort of CIAC Balance	\$ 94,963	Line 18 + Line 22	
25				
26	2006 Beginning CIAC/ICFA Balance	\$ 4,396,451	Line 16 + Line 20	
27	CIAC/ICFA Amort Rate		3.50% From Page 2, Line 20, Col F	
28	2006 Amort on Beginning Balance		153,876	
29				
30	2006 CIAC/ICFA Addition	\$ 2,198,226	\$10,991,128 / 5 years	
31	CIAC/ICFA Amort Rate (Half Year Convention)		1.75% From Page 2, Line 20, Col F, divided by 2	
32	2006 Amort on CIAC/ICFA Addition		38,469	
33				
34	2006 Ending Accu Amort of CIAC Balance	\$ 192,345	Line 28 + Line 32	
35				
36	2007 Beginning CIAC/ICFA Balance	\$ 6,594,677	Line 26 + Line 30	
37	CIAC/ICFA Amort Rate		3.18% From Page 2, Line 21, Col F	
38	2007 Amort on Beginning Balance		209,711	
39				
40	2007 CIAC/ICFA Addition	\$ 2,198,226	\$10,991,128 / 5 years	
41	CIAC/ICFA Amort Rate (Half Year Convention)		1.59% From Page 2, Line 21, Col F, divided by 2	
42	2007 Amort on CIAC/ICFA Addition		34,952	
43				
44	2007 Ending Accu Amort of CIAC Balance	\$ 437,007		

Amortization
Calculation

Continued On Next Page

**RATE BASE ADJUSTMENT NO. 2 - ACCUMULATED AMORTIZATION OF CIAC/ ICFA
CONTINUED**

**Amortization
Calculation**

2008 Beginning CIAC/ICFA Balance	\$ 8,792,902	From Page 1, Line 36 + Line 40
CIAC/ICFA Amort Rate	3.91%	From Line 22, Col F
2008 Amort on Beginning Balance	343,802	
2008 CIAC/ICFA Addition	\$ 2,198,226	Col E Line 45 - Col E Line 44
CIAC/ICFA Amort Rate (Half Year Convention)	1.96%	From Line 22, Col F, divided by 2
2008 Amort on CIAC/ICFA Addition	43,085	
2008 Ending Accu Amort of CIAC Balance	\$ 823,895	Page 1, L 44 + Page 2, L 3,+ Page 2, L 7

[A]	[B]	[C]	[D]	[E]	[F]
Calculation of CIAC/ICFA Amortization Rate					
Year	Santa Cruz Gross Plant ¹	Santa Cruz Land & Land Rights ¹	Depreciable Plant ¹ Col B - Col C	Santa Cruz Depreciation Expense ¹	CIAC Amortization Rate Col E / Col D
2004	\$ 9,974,085	\$ 13,490	\$ 9,960,595	\$ 281,430	2.83%
2005	\$18,994,939	\$ 29,990	\$ 18,964,949	\$ 547,074	2.88%
2006	\$33,832,454	\$ 44,856	\$ 33,787,598	\$ 1,183,943	3.50%
2007	\$74,714,949	\$ 44,856	\$ 74,670,093	\$ 2,373,028	3.18%
2008	\$87,753,403	\$ 44,856	\$ 87,708,547	\$ 3,430,845	3.91%

¹ From Company provided Plant Additions, Retirements, and Accum Depreciation Schedule

OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	ADJ NO.	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
REVENUES:							
1	Flat Rate Revenues	\$ 6,009,748	\$ 122,612	1	\$ 6,132,360	\$ 5,444,899	\$ 11,577,259
2	Other Wastewater Revenues	339,704	-		339,704		339,704
3	Measured Reuse Revenues	171,749	-		171,749	-	171,749
4	Total Revenues	\$ 6,521,201	\$ 122,612		\$ 6,643,813	\$ 5,444,899	\$ 12,088,712
EXPENSES:							
7	Salaries and Wages - Employees	\$ 924,853	\$ (924,853)	2	\$ -	\$ -	\$ -
8	Employee Pensions and Benefits	215,792	(215,792)	2	-	-	-
9	Purchased Power	595,157	6,639	1	601,796	-	601,796
10	Fuel for Power Production	7,004	-		7,004	-	7,004
11	Chemicals	157,134	2,877	1	160,011	-	160,011
12	Materials and Supplies - Acct No. 720	263,301	-		263,301	-	263,301
13	Materials and Supplies - Acct No. 720.08	295,301	(196,867)	3	98,434	-	98,434
14	Contractual Services - Management Fees	-	1,112,024	2,4	1,112,024	-	1,112,024
15	Contractual Services - Testing	99,923	-		99,923	-	99,923
16	Contractual Services - Other	183,283	-		183,283	-	183,283
17	Rental of Building/Real Property	93,111	-		93,111	-	93,111
18	Rental of Equipment	20,469	-		20,469	-	20,469
19	Transportation Expense	35,559	-		35,559	-	35,559
20	Insurance - General Liability	52,375	-		52,375	-	52,375
21	Insurance - Other	4,320	-		4,320	-	4,320
22	Advertising Expense	-	-		-	-	-
23	Rate Case Expense	53,333	-		53,333	-	53,333
24	Bad Debt Expense	65,212	(6,919)	5	58,293	-	58,293
25	Miscellaneous Expense	56,965	-		56,965	-	56,965
26	Depreciation Expense	3,156,675	(823,895)	6	2,332,780	-	2,332,780
27	Taxes Other Than Income-Utility Regulatory	1,256	-		1,256	-	1,256
28	Taxes Other Than Income-Property Taxes	-	480,259	7	480,259	116,215	596,474
29	Taxes Other Than Income-Other	4,814	-		4,814	-	4,814
30	Income Taxes	90,848	(332,533)	8	(241,685)	2,056,812	1,815,128
31	Total Operating Expenses	\$ 6,376,685	\$ (899,060)		\$ 5,477,625	\$ 2,173,027	\$ 7,650,652
32							
33	Operating Income (Loss)	\$ 144,516	\$ 1,021,672		\$ 1,166,188	\$ 3,271,872	\$ 4,438,060

References:

Column (A): Company Schedule C-1, Page 2
Column (B): Schedule CSB-8
Column (C): Column (A) + Column (B)
Column (D): Schedules CSB-1 and CSB-2
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 Revenue and Expense Annualization Ref. Sch CSB-9	[C] ADJ #2 Salaries, Wages Pensions, & Benefits Ref. Sch CSB-10	[D] ADJ #3 Materials & Supplies Acct No. 720.08 Ref. Sch CSB-11	[E] ADJ #4 Contract Svcs Management Fees Ref. Sch CSB-12	[F] ADJ #5 Bad Debt Expense Ref. Sch CSB-13	[G] ADJ #6 Depreciation Expense Ref. Sch CSB-14	[H] ADJ #7 Property Taxes Ref. Sch CSB-15	[I] ADJ #8 Income Taxes Ref. Sch CSB-16	[J] STAFF ADJUSTED
1	521	Flat Rate Revenues	\$ 6,009,748	\$ 122,612	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,132,360
2	536	Other Wastewater Revenues	339,704	-	-	-	-	-	-	-	-	339,704
3	541	Measured Reuse Revenues	171,749	-	-	-	-	-	-	-	-	171,749
4		Total Revenues	\$ 6,521,201	\$ 122,612	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,643,813
5												
6		OPERATING EXPENSES:										
7	701	Salaries and Wages - Employees	\$ 924,853	-	(924,853)	-	-	-	-	-	-	\$ -
8	704	Employee Pensions and Benefits	215,792	-	(215,792)	-	-	-	-	-	-	-
10	715	Purchased Power	595,157	6,639	-	-	-	-	-	-	-	601,796
11	716	Fuel for Power Production	7,004	-	-	-	-	-	-	-	-	7,004
12	718	Chemicals	157,134	2,877	-	-	-	-	-	-	-	160,011
13	720	Materials and Supplies	263,301	-	-	-	-	-	-	-	-	263,301
14	720.08	Materials and Supplies	295,301	-	-	(196,867)	-	-	-	-	-	98,434
15	734	Contractual Services - Management Fees	-	-	1,140,645	-	(28,621)	-	-	-	-	1,112,024
16	735	Contractual Services - Testing	99,923	-	-	-	-	-	-	-	-	99,923
17	736	Contractual Services - Other	183,283	-	-	-	-	-	-	-	-	183,283
18	741	Rental of Building/Real Property	93,111	-	-	-	-	-	-	-	-	93,111
19	742	Rental of Equipment	20,469	-	-	-	-	-	-	-	-	20,469
20	650	Transportation Expense	35,559	-	-	-	-	-	-	-	-	35,559
21	757	Insurance - General Liability	52,375	-	-	-	-	-	-	-	-	52,375
22	759	Insurance - Other	4,320	-	-	-	-	-	-	-	-	4,320
23	760	Advertising Expense	-	-	-	-	-	-	-	-	-	-
24	767	Rate Case Expense	53,333	-	-	-	-	-	-	-	-	53,333
25	770	Bad Debt Expense	65,212	-	-	-	-	(6,919)	-	-	-	58,293
26	775	Miscellaneous Expense	56,965	-	-	-	-	-	-	-	-	56,965
27	403	Depreciation Expense	3,156,675	-	-	-	-	-	(823,895)	-	-	2,332,780
28	408.10	Taxes Other Than Income-Utility Regulator	1,256	-	-	-	-	-	-	-	-	1,256
29	408.11	Taxes Other Than Income-Property Taxes	-	-	-	-	-	-	-	480,259	-	480,259
30	408.13	Taxes Other Than Income-Other	4,814	-	-	-	-	-	-	-	-	4,814
31	409	Income Taxes	90,848	-	-	-	-	-	-	-	(332,533)	(241,685)
32		Total Operating Expenses	\$ 6,376,685	\$ 9,516	\$ -	\$ (196,867)	\$ (28,621)	\$ (6,919)	\$ (823,895)	\$ 480,259	\$ (332,533)	\$ 5,477,625
33												
34		Operating Income (Loss)	\$ 144,516	\$ 113,096	\$ -	\$ 196,867	\$ 28,621	\$ 6,919	\$ 823,895	\$ (480,259)	\$ 332,533	\$ 1,166,188

OPERATING INCOME ADJUSTMENT NO. 1 - REVENUE AND EXPENSE ANNUALIZATION

LINE NO.	Description	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Metered Water Sales - Actual	\$ 6,093,851	\$ -	\$ 6,093,851
2	Unbilled Revenue	38,508	-	38,508
3	Revenue Annualization to Metered Water Sales	(122,612)	122,612	-
4	Total	\$ 6,009,747	\$ 122,612	\$ 6,132,359
5				
6	Purchased Pumping Power - Actual	\$ 534,930	\$ -	\$ 534,930
7	Electrical District No. 3 Rate Increase	66,866	-	66,866
8	Annualization Adjustment to Pumping Power	(6,639)	6,639	-
9		\$ 595,157	\$ 6,639	\$ 601,796
10				
11	Chemicals - Actual	\$ 160,011	\$ -	\$ 160,011
12	Annualization Adjustment to Chemicals	(2,877)	2,877	
13		\$ 157,134	\$ 2,877	\$ 160,011
14				
15	Operating Income	\$ 5,257,456	\$ 113,096	\$ 5,370,552

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 2 - SALARIES, WAGES, PENSIONS, & BENEFITS

LINE NO.	Description	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Salaries and Wage Expense	\$ 924,853	\$ (924,853)	\$ -
2	Pension and Benefits	215,792	(215,792)	-
3		\$ 1,140,645	\$ (1,140,645)	\$ -
4				
5	Contractual Services - Management Fees	\$ -	\$ 1,140,645	\$ 1,140,645

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 3 - MATERIALS AND SUPPLIES, ACCT NO. 720.08

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Materials and Supplies, Acct No 720.08	295,301	\$ (196,867)	\$ 98,434

Materials and Supplies Acct No. 720.08		
2006	\$ -	Company Sch E-2
2007	\$ -	Company Sch E-2
2008	\$ 295,301	Company Sch E-2
	<u>\$ 295,301</u>	
Divided by 3	<u>3</u>	
	\$ 98,434	

References:

Column A: Company Schedule C-1 & E-2
Column B: Testimony, CSB; Data Request CSB 15-1
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 4 - CONTRACTUAL SERVICES, MANAGEMENT FEES

LINE NO.	DESCRIPTION	[A]		[B]		[C]	
		COMPANY AS FILED		STAFF ADJUSTMENTS		STAFF AS ADJUSTED	
1	Contractual Services - Management Fees	\$	-	\$	(28,621)	\$	(28,621)
2							
3							
4							
5	Bonuses (Indirect Allocation)	\$	1,905	Data Request Response CSB 2-28			
6	Bonuses (Direct Allocation)		5,213	From Trial Balance			
7	Kitchen Supplies		2,701	From Trial Balance			
8		\$	9,819				
9							
10							
11	Employee Moving & Hiring	\$	4,240	From Trial Balance			
12	Employee Training & Certification		8,343	From Trial Balance			
13	Employee Travel		23,170	From Trial Balance			
14	Employee Meals		1,850	From Trial Balance			
15			37,603				
16	Divided by 2 years		2				
17		\$	18,802				
18							
19	Total (Line 8 + Line 17)	\$	28,621				

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Global Water - Palo Verde Utilities Company
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Schedule CSB-13

OPERATING INCOME ADJUSTMENT NO. 5 - BAD DEBT EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Bad Debt Expense	65,212	(6,919)	58,293

References:

Column A: Company Data Request Response CSB 1.26 & RUCO 2.04(e)
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 6 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

LINE NO.	DESCRIPTION	[A] PLANT In SERVICE Per Staff	[B] NonDepreciable or Fully Depreciated PLANT	[C] DEPRECIABLE PLANT (Col A - Col B)	[D] DEPRECIATION RATE	[E] DEPRECIATION EXPENSE (Col C x Col D)
1	353 Land and Land Rights	\$ 186,009	\$ (186,009)	\$ 372,018	0.00%	\$ -
2	354 Structures and Improvements	16,520,426	-	16,520,426	3.33%	550,130
3	355 Power Generation Equipment	321,425	-	321,425	5.00%	16,071
4	360 Collection Sewers - Force	3,857,656	-	3,857,656	2.00%	77,153
5	361 Collection Sewers - Gravity	47,344,470	-	47,344,470	2.00%	946,889
6	363 Services to Customers	5,205,784	-	5,205,784	2.00%	104,116
7	364 Flow Measuring Devices	23,636	-	23,636	10.00%	2,364
8	370 Receiving Wells	1,940,450	-	1,940,450	3.33%	64,617
9	371 Pumping Equipment	3,878,776	-	3,878,776	12.50%	484,847
10	374 Reuse Distribution Reservoirs	11,043	-	11,043	2.50%	276
11	375 Reuse Transmission & Distribution System	10,912,763	-	10,912,763	2.50%	272,819
12	380 Treatment and Disposal Equipment	5,440,808	-	5,440,808	5.00%	272,040
13	381 Plant Sewers	78,384	-	78,384	5.00%	3,919
14	382 Outfall Sewers	353,645	-	353,645	3.33%	11,776
15	389 Other Plant and Miscellaneous Equipment	2,271,644	-	2,271,644	6.67%	151,519
16	390 Office Furniture and Equipment	138,995	-	138,995	6.67%	9,271
17	391 Transportation Equipment	165,404	-	165,404	20.00%	33,081
18	393 Tools, Shop, and Garage Equipment	100,819	-	100,819	5.00%	5,041
19	394 Laboratory Equipment	36,073	-	36,073	10.00%	3,607
20	395 Power Operated Equipment	10,320	-	10,320	5.00%	516
21	396 Communication Equipment	38,289	-	38,289	10.00%	3,829
22	397 Miscellaneous Equipment	359,170	-	359,170	10.00%	35,917
23	398 Other Tangible Equipment	1,068,758	-	1,068,758	10.00%	106,876
24	Total Plant	\$ 100,264,747	\$ -	\$ 100,450,756		\$ 3,156,675
25						
29						
30	Depreciation Expense Before Amortization of CIAC:	\$ 3,156,675				
31	Less Amortization of CIAC:	\$ 823,895				
32	Test Year Depreciation Expense - Staff:	\$ 2,332,780				
33	Depreciation Expense - Company:	3,156,675				
34	Staff's Total Adjustment:	<u>\$ (823,895)</u>				

References:

Column [A]: Schedule CSB-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

OPERATING INCOME ADJUSTMENT NO. 7 - PROPERTY TAX EXPENSE

LINE NO.	Property Tax Calculation	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	\$ 6,643,813	\$ 6,643,813
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	13,287,626	\$ 13,287,626
4	Staff Recommended Revenue, Per Schedule CSB-1	6,643,813	\$ 12,088,712
5	Subtotal (Line 4 + Line 5)	19,931,439	25,376,338
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	6,643,813	\$ 8,458,779
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	13,287,626	\$ 16,917,559
10	Plus: 10% of CWIP -	1,778,334	1,778,334
11	Less: Net Book Value of Licensed Vehicles	65,257	\$ 65,257
12	Full Cash Value (Line 9 + Line 10 - Line 11)	15,000,703	\$ 18,630,635
13	Assessment Ratio	21.0%	21.0%
14	Assessment Value (Line 12 * Line 13)	3,150,148	\$ 3,912,433
15	Composite Property Tax Rate	15.2456%	15.2456%
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$ 480,259	\$ -
17	Company Proposed Property Tax	-	
18	Staff Test Year Adjustment (Line 16-Line 17)	\$ 480,259	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$ 596,474
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		\$ 480,259
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		\$ 116,215
22	Increase to Property Tax Expense		\$ 116,215
23	Increase in Revenue Requirement		5,444,899
24	Increase to Property Tax per Dollar Increase in Revenue (Line 19/Line 20)		2.134384%

Global Water - Palo Verde Utilities Company
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Schedule CSB-16

OPERATING INCOME ADJUSTMENT NO. 8 - INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Income Tax Expense - Test Year	90,848	(332,533)	(241,685)

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	[A] COMPANY ORIGINAL COST	[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	\$ 45,260,919	\$ 39,155,692
2	Adjusted Operating Income (Loss)	\$ 1,969,624	\$ 2,641,857
3	Current Rate of Return (L2 / L1)	4.35%	6.75%
4	Required Rate of Return	8.49%	8.50%
5	Required Operating Income (L4 * L1)	\$ 3,842,652	\$ 3,328,234
6	Operating Income Deficiency (L5 - L2)	\$ 1,873,028	\$ 686,377
7	Gross Revenue Conversion Factor	1.64509	1.66415
8	Increase (Decrease) In Gross Revenue (L7 * L6)	\$ 3,081,292	\$ 1,142,237
9	Adjusted Test Year Revenue	\$ 9,110,720	\$ 9,409,861
10	Proposed Annual Revenue (L8 + L9)	\$ 12,192,012	\$ 10,552,098
11	Required Increase/(Decrease in Revenue) (%) (L8/L9)	33.82%	12.14%

References:

Column [A]: Company Schedules A-1, C-1, C-3, & D-1
Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-7

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
<u>Calculation of Gross Revenue Conversion Factor:</u>					
1	Revenue	100.0000%			
2	Uncollectible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.9094%			
5	Subtotal (L3 - L4)	60.0906%			
6	Revenue Conversion Factor (L1 / L5)	1.664154			
<u>Calculation of Uncollectible Factor:</u>					
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	38.5989%			
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0.0000%			
<u>Calculation of Effective Tax Rate:</u>					
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.9680%			
14	Federal Taxable Income (L12 - L13)	93.0320%			
15	Applicable Federal Income Tax Rate (Line 53)	34.0000%			
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%			
17	Combined Federal and State Income Tax Rate (L13 + L16)		38.5989%		
<u>Calculation of Effective Property Tax Factor</u>					
18	Unity	100.0000%			
19	Combined Federal and State Income Tax Rate (L17)	38.5989%			
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%			
21	Property Tax Factor (CSB-15, Col B, L24)	2.1344%			
22	Effective Property Tax Factor (L20*L21)		1.3105%		
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.9094%	
24	Required Operating Income (Schedule CSB-1, Line 5)	\$ 3,328,234			
25	Adjusted Test Year Operating Income (Loss) (Sch CSB-7, Col C, Line 34)	2,641,857			
26	Required Increase in Operating Income (L24 - L25)		\$ 686,377		
27	Income Taxes on Recommended Revenue (Col. [E], L52)	\$ 1,378,419			
28	Income Taxes on Test Year Revenue (Col. [B], L52)	946,939			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		431,480		
30	Recommended Revenue Requirement (Schedule CSB-1, Line 10)	\$ 10,552,098			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L30*L31)	\$ -			
33	Adjusted Test Year Uncollectible Expense	\$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)				
35	Property Tax with Recommended Revenue (CSB-15, Col B, L19)	\$ 698,801			
36	Property Tax on Test Year Revenue (CSB-15, Col A, L16)	674,421			
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		24,380		
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)		\$ 1,142,237		
<u>Calculation of Income Tax:</u>					
		Test Year		Staff Recommended	
39	Revenue (Schedule CSB-11, Col. [C], Line 5 & Sch. CSB-1, Col. [D] Line	\$ 9,409,861	\$ 1,142,237	\$10,552,098	
40	Operating Expenses Excluding Income Taxes	\$ 5,821,065	\$ 24,380	\$ 5,845,445	
41	Synchronized Interest (L56)	\$ 1,135,515		\$ 1,135,515	
42	Arizona Taxable Income (L39 - L40 - L41)	\$ 2,453,281		\$ 3,571,138	
43	Arizona State Income Tax Rate	6.9680%		6.9680%	
44	Arizona Income Tax (L42 x L43)	\$ 170,945		\$ 248,837	
45	Federal Taxable Income (L42 - L44)	\$ 2,282,336		\$ 3,322,301	
46	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
47	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
48	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
49	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
50	Federal Tax on All Income (\$0-\$10,000,000) @ 34%	\$ 775,994		\$ 1,129,582	
51	Total Federal Income Tax	\$ 775,994		\$ 1,129,582	
52	Combined Federal and State Income Tax (L44 + L51)	\$ 946,939		\$ 1,378,419	
53	Applicable Federal Income Tax Rate [Col. [C], L51 - Col. [A], L51] / [Col. [C], L45 - Col. [A], L45]			34.0000%	
<u>Calculation of Interest Synchronization:</u>					
54	Rate Base (Schedule CSB-3, Col. (C), Line 14	\$ 39,155,692			
55	Weighted Average Cost of Debt	2.9000%			
56	Synchronized Interest (L45 X L46)	\$ 1,135,515			

RATE BASE - ORIGINAL COST

LINE NO.	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	ADJ NO.	(C) STAFF AS ADJUSTED
1	Plant in Service	\$ 87,753,403		\$ 87,753,403
2	Less: Accumulated Depreciation	(8,092,185)		(8,092,185)
3	Net Plant in Service	<u>\$ 79,661,218</u>		<u>\$ 79,661,218</u>
<u>LESS:</u>				
4	Advances in Aid of Construction (AIAC)	\$ 33,770,450		\$ 33,770,450
5	Service Line and Meter Advances	\$ -		\$ -
6	Contributions in Aid of Construction (CIAC)	\$ -	1	\$ 6,600,076
7	Less: Accumulated Amortization	-	2	494,849
8	Net CIAC	<u>\$ -</u>		<u>\$ 6,105,227</u>
9	Total Advances and Contributions	\$ 33,770,450		\$ 39,875,677
10	Customer Deposits	\$ 1,136,087		\$ 1,136,087
11	Accumulated Deferred Income Taxes	\$ -		\$ -
<u>ADD:</u>				
12	Deferred Tax Asset	\$ 506,238		\$ 506,238
13	Working Capital	\$ -		\$ -
14	Total Rate Base	<u>\$ 45,260,919</u>		<u>\$ 39,155,692</u>

References:

Column [A], Company Schedule B-1, Page 1
Column [B]: Schedule CSB-4
Column [C]: Column [A] + Column [B]

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.		[A]	[B]	[C]	[D]
	PLANT IN SERVICE		Adj No.1	Adj No. 2	
	Acct. COMPANY	CIAC	Accumulated	Amort of CIAC	STAFF AS
	No. Plant Description	AS FILED	Ref: Sch CSB-5	Ref: Sch CSB-6	ADJUSTED
1					
2	303 Land and Land Rights	\$ 44,856	\$ -	\$ -	\$ 44,856
3	304 Structures and Improvements	9,447,338	-	-	9,447,338
4	306 Lake, River, and Other Intakes	1,855	-	-	1,855
5	307 Wells and Springs	3,694,926	-	-	3,694,926
6	309 Supply Mains	2,086,246	-	-	2,086,246
7	310 Power Generation Equipment	323,093	-	-	323,093
8	311 Pumping Equipment	6,353,511	-	-	6,353,511
9	320 Water Treatment Equipment	12,554	-	-	12,554
10	330 Distribution Reservoirs and Standpipes	1,367,063	-	-	1,367,063
11	331 Transmission and Distribution Mains	44,443,414	-	-	44,443,414
12	333 Services	4,598,396	-	-	4,598,396
13	334 Meters and Meter Installations	3,553,579	-	-	3,553,579
14	335 Hydrants	4,340,566	-	-	4,340,566
15	336 Backflow Prevention Devices	26,572	-	-	26,572
16	339 Other Plant and Miscellaneous Equipment	695,109	-	-	695,109
17	340 Office Furniture and Equipment	504,424	-	-	504,424
18	341 Transportation Equipment	596,576	-	-	596,576
19	343 Tools, Shop, and Garage Equipment	65,276	-	-	65,276
20	344 Laboratory Equipment	107,172	-	-	107,172
21	345 Power Operated Equipment	60,372	-	-	60,372
22	346 Communication Equipment	565,936	-	-	565,936
23	347 Miscellaneous Equipment	80,859	-	-	80,859
24	348 Other Tangible Equipment	4,783,710	-	-	4,783,710
25	Total Plant in Service - Actual	\$ 87,753,403	\$ -	\$ -	\$ 87,753,403
26	Less: Accumulated Depreciation	\$ (8,092,185)	\$ -	\$ -	\$ (8,092,185)
27	Net Plant in Service	\$ 79,661,218	\$ -	\$ -	\$ 79,661,218
28					
29	<u>LESS:</u>				
30	Advances in Aid of Construction (AIAC)	\$ 33,770,450	\$ -	\$ -	\$ 33,770,450
31	Service Line and Meter Advances	\$ -	-	-	\$ -
32					
33	Contributions in Aid of Construction (CIAC)	\$ -	-	-	\$ -
34	CIAC/ICFAS - Plant	-	6,600,076	-	6,600,076
35	CIAC/ICFAS - Other	-	-	-	-
36	Total CIAC - Adjusted	\$ -	\$ 6,600,076	\$ -	\$ 6,600,076
37					
38	Less: Accumulated Amortization of CIAC	\$ -	-	-	\$ -
39	Accum Amort of CIAC / ICFAs - Plant	-	-	494,849	494,849
40	Total Accumulated Amortization of CIAC	\$ -	\$ -	\$ 494,849	\$ 494,849
41					
42	Net CIAC	\$ -	6,600,076	(494,849)	\$ 6,105,227
43					
44	Total Advances and Net Contributions	\$ 33,770,450	\$ 6,600,076	\$ (494,849)	\$ 39,875,677
45					
46	Customer Deposits	\$ 1,136,087	-	-	\$ 1,136,087
47	Accumulated Deferred Taxes	\$ -	-	-	\$ -
48					
49	<u>ADD:</u>				
50	Deferred Tax Asset	\$ 506,238	-	-	\$ 506,238
51	Working Capital Allowance	\$ -	-	-	\$ -
52	Total Rate Base	\$ 45,260,919	\$ (6,600,076)	\$ 494,849	\$ 39,155,692

Santa Cruz Water Company
Docket No. SW-20446A-09-0080
Test Year Ended December 31, 2008

Schedule CSB-5

RATE BASE ADJUSTMENT NO. 1 - CONTRIBUTION IN AID OF CONSTRUCTION, ICFAS

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	CIAC/ICFAS - Plant	\$ -	6,600,076	\$ 6,600,076

References:

Column [A]: Company Schedule B-2
Column [B]: Testimony, CSB
Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 2 - ACCUMULATED AMORTIZATION OF CIAC/ICFAS

LINE NO.	DESCRIPTION	[A]		[B]		[C]	
		COMPANY AS FILED		STAFF ADJUSTMENTS		STAFF AS ADJUSTED	
1	Accumulated Amortization of CIAC/ICFA	\$	-	\$	494,849	\$	494,849
2							
3							
4							
5							
6	2004 Beginning CIAC/ICFA Balance	\$	-				
7	CIAC/ICFA Amort Rate			2.83%	From Page 2, Line 18, Col F		
8	2004 Amort on Beginning Balance			-			
9							
10	2004 CIAC/ICFA Addition	\$	1,320,015	\$6,600,076 / 5 years			
11	CIAC/ICFA Amort Rate (Half Year Convention)			1.41%	From Page 2, Line 18, Col F, divided by 2		
12	2004 Amort on CIAC/ICFA Addition			18,612			
13							
14	2004 Ending Accu Amort of CIAC Balance	\$	18,612	Line 8 + Line 12			
15							
16	2005 Beginning CIAC/ICFA Balance	\$	1,320,015	\$6,600,076 / 5 years			
17	CIAC/ICFA Amort Rate			2.88%	From Page 2, Line 19, Col F		
18	2005 Amort on Beginning Balance			38,077.93			
19							
20	2005 CIAC/ICFA Addition	\$	1,320,015	\$6,600,076 / 5 years			
21	CIAC/ICFA Amort Rate (Half Year Convention)			1.44%	From Page 2, Line 19, Col F, divided by 2		
22	2005 Amort on CIAC/ICFA Addition			19,008			
23							
24	2005 Ending Accu Amort of CIAC Balance	\$	57,086	Line 18 + Line 22			
25							
26	2006 Beginning CIAC/ICFA Balance	\$	2,640,030				
27	CIAC/ICFA Amort Rate			3.50%	From Page 2, Line 20, Col F		
28	2006 Amort on Beginning Balance			92,508.66			
29							
30	2006 CIAC/ICFA Addition	\$	1,320,015	\$6,600,076 / 5 years			
31	CIAC/ICFA Amort Rate (Half Year Convention)			1.75%	From Page 2, Line 20, Col F, divided by 2		
32	2006 Amort on CIAC/ICFA Addition			23,100			
33							
34	2006 Ending Accu Amort of CIAC Balance	\$	115,609	Line 28 + Line 32			
35							
36	2007 Beginning CIAC/ICFA Balance	\$	3,960,046				
37	CIAC/ICFA Amort Rate			3.18%	From Page 2, Line 21, Col F		
38	2007 Amort on Beginning Balance			125,929			
39							
40	2007 CIAC/ICFA Addition	\$	1,320,015	\$6,600,076 / 5 years			
41	CIAC/ICFA Amort Rate (Half Year Convention)			1.59%	From Page 2, Line 21, Col F, divided by 2		
42	2007 Amort on CIAC/ICFA Addition			20,988			
43							
44	2007 Ending Accu Amort of CIAC Balance	\$	262,527				

Amortization
Calculation

Continued On Next Page

**RATE BASE ADJUSTMENT NO. 2 - ACCUMULATED AMORTIZATION OF CIAC/ ICFAS
CONTINUED**

**Amortization
Calculation**

2008 Beginning CIAC/ICFA Balance	\$ 5,280,061	From Page 1, Line 36 + Line 40
CIAC/ICFA Amort Rate	3.91%	From Line 22, Col. F
2008 Amort on Beginning Balance	206,450	
2008 CIAC/ICFA Addition	\$ 1,320,015	\$6,600,076 / 5 years
CIAC/ICFA Amort Rate (Half Year Convention)	1.96%	From Line 22, Col F, divided by 2
2008 Amort on CIAC/ICFA Addition	25,872	
2008 Ending Accu Amort of CIAC Balance	\$ 494,849	Page 1, L 44 + Page 2, L 3, + Page 2, L 7

[A]	[B]	[C]	[D]	[E]	[F]
Calculation of CIAC/ICFA Amortization Rate					
Year	Santa Cruz Gross Plant ¹	Santa Cruz Land & Land Rights ¹	Depreciable Plant ¹ Col B - Col C	Santa Cruz Depreciation Expense ¹	CIAC Amortization Rate Col E / Col D
2004	\$ 9,974,085	\$ 13,490	\$ 9,960,595	\$ 281,430	2.83%
2005	\$18,994,939	\$ 29,990	\$ 18,964,949	\$ 547,074	2.88%
2006	\$33,832,454	\$ 44,856	\$ 33,787,598	\$ 1,183,943	3.50%
2007	\$74,714,949	\$ 44,856	\$ 74,670,093	\$ 2,373,028	3.18%
2008	\$87,753,403	\$ 44,856	\$ 87,708,547	\$ 3,430,845	3.91%

¹ From Company provided Plant Additions, Retirements, and Accum Depreciation Schedule

OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	ADJ NO.	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
REVENUES:							
1	Metered Water Sales	\$ 8,744,774	\$ 299,141	1	\$ 9,043,915	\$ 1,142,237	\$ 10,186,152
2	Water Sales - Unmetered	-	-		-	-	-
3	Other Operating Revenues	365,946	-		365,946	-	365,946
4	Total Revenues	\$ 9,110,720	\$ 299,141		\$ 9,409,861	\$ 1,142,237	\$ 10,552,098
EXPENSES:							
7	Salaries and Wages - Employees	\$ 781,051	\$ (781,051)	2	\$ -	\$ -	\$ -
8	Employee Pensions and Benefits	189,983	(189,983)	2	-	-	-
9	Purchased Water	-	-		-	-	-
10	Purchased Power	554,398	16,603	1	571,001	-	571,001
11	Fuel for Power Production	3,505	-		3,505	-	3,505
12	Chemicals	40,455	1,328	1	41,783	-	41,783
13	Materials and Supplies - Acct. No. 620	18,969	-		18,969	-	18,969
14	Materials and Supplies - Acct. No. 620.08	297,033	(191,860)	3	105,173	-	105,173
15	Contractual Services - Management Fees	-	932,681	2,4	932,681	-	932,681
16	Contractual Services - Testing	36,113	-		36,113	-	36,113
17	Contractual Services - Other	67,911	-		67,911	-	67,911
18	Rental of Building/Real Property	94,369	-		94,369	-	94,369
19	Rental of Equipment	7,803	-		7,803	-	7,803
20	Transportation Expense	45,296	-		45,296	-	45,296
21	Insurance - General Liability	53,083	-		53,083	-	53,083
22	Insurance - Other	4,647	-		4,647	-	4,647
23	Advertising Expense	-	-		-	-	-
24	Rate Case Expense	53,333	-		53,333	-	53,333
25	Bad Debt Expense	91,107	(49,147)	5	41,960	-	41,960
26	Miscellaneous Expense	34,629	-		34,629	-	34,629
27	Depreciation Expense	3,506,485	(494,849)	6	3,011,636	-	3,011,636
28	Taxes Other Than Income-Utility Regulatory	15,929	-		15,929	-	15,929
29	Taxes Other Than Income-Property Taxes	-	674,421	7	674,421	24,380	698,801
30	Taxes Other Than Income-Other	6,823	-		6,823	-	6,823
31	Income Taxes	1,238,174	(291,235)	8	946,939	431,480	1,378,419
32	Total Operating Expenses	\$ 7,141,096	\$ (373,092)		\$ 6,768,004	\$ 455,860	\$ 7,223,864
34	Operating Income (Loss)	\$ 1,969,624	\$ 672,233		\$ 2,641,857	\$ 686,377	\$ 3,328,234

References:

Column (A): Company Schedule C-1, Page 2
Column (B): Schedule CSB-8
Column (C): Column (A) + Column (B)
Column (D): Schedules CSB-1 and CSB-2
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 Revenue and Expense Annualization Ref. Sch CSB-9	[C] ADJ #2 Salaries, Wages, Pensions, & Benefits Ref. Sch CSB-10	[D] ADJ #3 Materials & Supplies Acct No. 620.08 Ref. Sch CSB-11	[E] ADJ #4 Contract Svcs Management Fees Ref. Sch CSB-12	[F] ADJ #5 Bad Debt Expense Ref. Sch CSB-13	[G] ADJ #6 Depreciation Expense Ref. Sch CSB-14	[H] ADJ #7 Property Taxes Ref. Sch CSB-15	[I] ADJ #8 Income Taxes Ref. Sch CSB-16	[J] STAFF ADJUSTED
1		REVENUES:										
2		Metered Water Sales	\$ 8,744,774	\$ 299,141	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,043,915
3		Water Sales - Unmetered	-	-	-	-	-	-	-	-	-	-
4		Other Operating Revenues	365,946	-	-	-	-	-	-	-	-	-
5		Total Revenues	\$ 9,110,720	\$ 299,141	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,409,861
6		OPERATING EXPENSES:										
7	601	Salaries and Wages - Employees	\$ 781,051	-	(781,051)	-	-	-	-	-	-	-
8	604	Employee Pensions and Benefits	189,983	-	(189,983)	-	-	-	-	-	-	-
9	610	Purchased Water	-	-	-	-	-	-	-	-	-	-
10	615	Fuel for Power Production	554,398	16,603	-	-	-	-	-	-	-	571,001
11	616	Chemicals	3,505	-	-	-	-	-	-	-	-	3,505
12	618	Fuel for Power Production	40,455	1,328	-	-	-	-	-	-	-	41,783
13	620	Materials and Supplies	18,969	-	-	-	-	-	-	-	-	18,969
14	620.08	Materials and Supplies	297,033	-	-	(191,860)	-	-	-	-	-	105,173
15	634	Contractual Services - Management Fees	-	-	971,034	-	(38,353)	-	-	-	-	932,681
16	635	Contractual Services - Testing	36,113	-	-	-	-	-	-	-	-	36,113
17	636	Contractual Services - Other	67,911	-	-	-	-	-	-	-	-	67,911
18	641	Rental of Building/Real Property	94,369	-	-	-	-	-	-	-	-	94,369
19	642	Rental of Equipment	7,803	-	-	-	-	-	-	-	-	7,803
20	650	Transportation Expense	45,296	-	-	-	-	-	-	-	-	45,296
21	657	Insurance - General Liability	53,083	-	-	-	-	-	-	-	-	53,083
22	659	Insurance - Other	4,647	-	-	-	-	-	-	-	-	4,647
23	660	Advertising Expense	-	-	-	-	-	-	-	-	-	-
24	667	Rate Case Expense	53,333	-	-	-	-	-	-	-	-	53,333
25	670	Bad Debt Expense	91,107	-	-	-	(49,147)	-	-	-	-	41,960
26	675	Miscellaneous Expense	34,629	-	-	-	-	-	-	-	-	34,629
27	403	Depreciation Expense	3,506,485	-	-	-	-	-	(494,849)	-	-	3,011,636
28	408	Taxes Other Than Income-Utility Regulatory	15,929	-	-	-	-	-	-	-	-	15,929
29	408.11	Taxes Other Than Income-Property Taxes	-	-	-	-	-	-	-	674,421	-	674,421
30	408.13	Taxes Other Than Income-Other	6,823	-	-	-	-	-	-	-	-	6,823
31	409	Income Taxes	1,238,174	-	-	-	-	-	-	-	(291,235)	946,939
32		Total Operating Expenses	\$ 7,141,096	\$ 17,931	\$ -	\$ (191,860)	\$ (38,353)	\$ (49,147)	\$ (494,849)	\$ 674,421	\$ (291,235)	\$ 6,768,004
33		Operating Income (Loss)	\$ 1,969,624	\$ 281,210	\$ -	\$ 191,860	\$ 38,353	\$ 49,147	\$ 494,849	\$ (674,421)	\$ 291,235	\$ 2,641,857

OPERATING INCOME ADJUSTMENT NO. 1 - REVENUE AND EXPENSE ANNUALIZATION

LINE NO.	Description	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Metered Water Sales - Actual	\$ 8,941,756	\$ -	\$ 8,941,756
2	Unbilled Revenue	102,160	-	102,160
3	Revenue Annualization to Metered Water Sales	(299,141)	299,141	-
4	Total	\$ 8,744,775	\$ 299,141	\$ 9,043,916
5				
6	Purchased Pumping Power - Actual	\$ 507,556	\$ -	\$ 507,556
7	Electrical District No. 3 Rate Increase	63,445	-	63,445
8	Annualization Adjustment to Pumping Power	(16,603)	16,603	-
9		\$ 554,398	\$ 16,603	\$ 571,001
10				
11	Chemicals - Actual	\$ 41,783	\$ -	\$ 41,783
12	Annualization Adjustment to Chemicals	(1,328)	\$ 1,328	
13		\$ 40,455	\$ 1,328	\$ 41,783
14				
15	Operating Income	\$ 8,149,922	\$ 281,210	\$ 8,431,132

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 2 - SALARIES, WAGES, PENSIONS, & BENEFITS

LINE NO.	Description	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Salaries and Wage Expense	\$ 781,051	\$ (781,051)	\$ -
2	Pension and Benefits	189,983	(189,983)	-
3		\$ 971,034	\$ (971,034)	\$ -
4				
5	Contractual Services - Management Fees	\$ -	\$ 971,034	\$ 971,034

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 3 - MATERIALS AND SUPPLIES, ACCT NO. 620.08

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Materials and Supplies, Acct No 620.08	297,033	\$ (191,860)	\$ 105,173

Materials and Supplies Acct No. 620.08		
2006	\$ 18,487	Company Sch E-2
2007	\$ -	Company Sch E-2
2008	\$ 297,033	Company Sch E-2
	<u>\$ 315,520</u>	
Divided by 3	<u>3</u>	
	\$ 105,173	

References:

Column A: Company Schedule C-1 & E-2
Column B: Testimony, CSB; Data Request CSB 15-1
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 4 - CONTRACTUAL SERVICES, MANAGEMENT FEES

LINE NO.	DESCRIPTION	[A] [B] [C]		
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Contractual Services - Management Fees	\$ -	\$ (38,353)	\$ (38,353)
2				
3				
4	Bonuses (Indirect Allocation)	\$ 1,905	Data Request Response CSB 2-33	
5	Bonuses (Direct Allocation)	9,822	From Trial Balance	
6	Kitchen Supplies	2,647	From Trial Balance	
7		\$ 14,374		
8				
9				
10	Employee Moving & Hiring	\$ 1,863	From Trial Balance	
11	Employee Training & Certification	8,268	From Trial Balance	
12	Employee Travel	35,918	From Trial Balance	
13	Employee Meals	1,908	From Trial Balance	
14		47,957		
15	Divided by 2 years	2		
16		\$ 23,979		
17				
18	Total (Line 7 + Line 16)	\$ 38,353		

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 5 - BAD DEBT EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Bad Debt Expense	91,107	(49,147)	41,960

References:

Column A: Company Data Request Response CSB 1.26 & RUCO 2.04(e)
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 6 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

LINE NO.	DESCRIPTION	[A] PLANT In SERVICE Per Staff	[B] NonDepreciable or Fully Depreciated PLANT	[C] DEPRECIABLE PLANT (Col A - Col B)	[D] DEPRECIATION RATE	[E] DEPRECIATION EXPENSE (Col C x Col D)
1	303 Land and Land Rights	\$ 44,856	\$ (44,856)	\$ 89,712	0.00%	\$ -
2	304 Structures and Improvements	9,447,338	-	9,447,338	3.33%	314,596
3	306 Lake, River, and Other Intakes	1,855	-	1,855	2.50%	46
4	307 Wells and Springs	3,694,926	-	3,694,926	3.33%	123,041
5	309 Supply Mains	2,086,246	-	2,086,246	2.00%	41,725
6	310 Power Generation Equipment	323,093	-	323,093	5.00%	16,155
7	311 Pumping Equipment	6,353,511	-	6,353,511	12.50%	794,189
8	320 Water Treatment Equipment	12,554	-	12,554	3.33%	418
9	330 Distribution Reservoirs and Standpipes	1,367,063	-	1,367,063	2.22%	30,349
10	331 Transmission and Distribution Mains	44,443,414	-	44,443,414	2.00%	888,868
11	333 Services	4,598,396	-	4,598,396	3.33%	153,127
12	334 Meters and Meter Installations	3,553,579	-	3,553,579	8.33%	296,013
13	335 Hydrants	4,340,566	-	4,340,566	2.00%	86,811
14	336 Backflow Prevention Devices	26,572	-	26,572	6.67%	1,772
15	339 Other Plant and Miscellaneous Equipment	695,109	-	695,109	6.67%	46,364
16	340 Office Furniture and Equipment	504,424	-	504,424	6.67%	33,645
17	341 Transportation Equipment	596,576	-	596,576	20.00%	119,315
18	343 Tools, Shop, and Garage Equipment	65,276	-	65,276	5.00%	3,264
19	344 Laboratory Equipment	107,172	-	107,172	10.00%	10,717
20	345 Power Operated Equipment	60,372	-	60,372	5.00%	3,019
21	346 Communication Equipment	565,936	-	565,936	10.00%	56,594
22	347 Miscellaneous Equipment	80,859	-	80,859	10.00%	8,086
23	348 Other Tangible Equipment	4,783,710	-	4,783,710	10.00%	478,371
24	Total Plant	\$ 87,753,403	\$ -	\$ 87,798,259		\$ 3,506,485
25						
29						
30	Depreciation Expense Before Amortization of CIAC:	\$ 3,506,485				
31	Less Amortization of CIAC:	\$ 494,849				
32	Test Year Depreciation Expense - Staff:	\$ 3,011,636				
33	Depreciation Expense - Company:	3,506,485				
34	Staff's Total Adjustment:	\$ (494,849)				

References:

Column [A]: Schedule CSB-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

OPERATING INCOME ADJUSTMENT NO. 7 - PROPERTY TAX EXPENSE

LINE NO.	Property Tax Calculation	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	\$ 9,409,861	\$ 9,409,861
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	18,819,722	\$ 18,819,722
4	Staff Recommended Revenue, Per Schedule CSB-1	9,409,861	\$ 10,552,098
5	Subtotal (Line 4 + Line 5)	28,229,583	29,371,820
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	9,409,861	\$ 9,790,607
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	18,819,722	\$ 19,581,213
10	Plus: 10% of CWIP -	2,545,207	2,545,207
11	Less: Net Book Value of Licensed Vehicles	299,641	\$ 299,641
12	Full Cash Value (Line 9 + Line 10 - Line 11)	21,065,288	\$ 21,826,780
13	Assessment Ratio	21.0%	21.0%
14	Assessment Value (Line 12 * Line 13)	4,423,711	\$ 4,583,624
15	Composite Property Tax Rate	15.2456%	15.2456%
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$ 674,421	\$ -
17	Company Proposed Property Tax	-	
18	Staff Test Year Adjustment (Line 16-Line 17)	\$ 674,421	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$ 698,801
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		\$ 674,421
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		\$ 24,380
22	Increase to Property Tax Expense		\$ 24,380
23	Increase in Revenue Requirement		1,142,237
24	Increase to Property Tax per Dollar Increase in Revenue (Line 19/Line 20)		2.134384%

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OPERATING INCOME ADJUSTMENT NO. 8 - INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Income Tax Expense - Test Year	1,238,174	(291,235)	946,939

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	[A] COMPANY ORIGINAL COST	[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	\$ 2,251,164	\$ 2,251,164
2	Adjusted Operating Income (Loss)	\$ (95,459)	\$ (74,816)
3	Current Rate of Return (L2 / L1)	-4.24%	-3.32%
4	Required Rate of Return	9.24%	8.20%
5	Required Operating Income (L4 * L1)	\$ 208,008	\$ 184,595
6	Operating Income Deficiency (L5 - L2)	\$ 303,467	\$ 259,411
7	Gross Revenue Conversion Factor	1.64509	1.65100
8	Increase (Decrease) In Gross Revenue (L7 * L6)	\$ 499,229	\$ 428,289
9	Adjusted Test Year Revenue	\$ 473,527	\$ 473,527
10	Proposed Annual Revenue (L8 + L9)	\$ 972,756	\$ 901,816
11	Required Increase/Decrease in Revenue (%) (L8/L9)	105.43%	90.45%

References:

Column [A]: Company Schedules A-1, C-1, C-3, & D-1

Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-5

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
<u>Calculation of Gross Revenue Conversion Factor:</u>					
1	Revenue	100.0000%			
2	Uncollectible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.4308%			
5	Subtotal (L3 - L4)	60.5692%			
6	Revenue Conversion Factor (L1 / L5)	1.651005			
<u>Calculation of Uncollectible Factor:</u>					
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	38.5989%			
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0.0000%			
<u>Calculation of Effective Tax Rate:</u>					
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.9680%			
14	Federal Taxable Income (L12 - L13)	93.0320%			
15	Applicable Federal Income Tax Rate (Line 53)	34.0000%			
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%			
17	Combined Federal and State Income Tax Rate (L13 + L16)		38.5989%		
<u>Calculation of Effective Property Tax Factor</u>					
18	Unity	100.0000%			
19	Combined Federal and State Income Tax Rate (L17)	38.5989%			
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%			
21	Property Tax Factor (CSB-11, Col B, L24)	1.3549%			
22	Effective Property Tax Factor (L20*L21)		0.8319%		
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.4308%	
24	Required Operating Income (Schedule CSB-1, Line 5)	\$ 184,595			
25	Adjusted Test Year Operating Income (Loss) (Sch CSB-5, Col C, L34)	(74,816)			
26	Required Increase in Operating Income (L24 - L25)		\$ 259,411		
27	Income Taxes on Recommended Revenue (Col. [E], L52)	\$ 97,646			
28	Income Taxes on Test Year Revenue (Col. [B], L52)	(65,429)			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		163,075		
30	Recommended Revenue Requirement (Schedule CSB-1, Line 10)	\$ 901,816			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L30*L31)	\$ -			
33	Adjusted Test Year Uncollectible Expense	\$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)				
35	Property Tax with Recommended Revenue (CSB-11, Col B, L19)	\$ 24,713			
36	Property Tax on Test Year Revenue (CSB-11, Col A, L16)	18,910			
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		5,803		
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)		\$ 428,289		
<u>Calculation of Income Tax:</u>					
39	Revenue (Schedule CSB-11, Col. [C], Line 5 & Sch. CSB-1, Col. [D] Line	\$ 473,527	\$ 428,289	\$ 901,816	
40	Operating Expenses Excluding Income Taxes	\$ 613,772	\$ 5,803	\$ 619,575	
41	Synchronized Interest (L56)	\$ 29,265		\$ 29,265	
42	Arizona Taxable Income (L39 - L40 - L41)	\$ (169,510)		\$ 252,976	
43	Arizona State Income Tax Rate	6.9680%		6.9680%	
44	Arizona Income Tax (L42 x L43)	\$ (11,811)		\$ 17,627	
45	Federal Taxable Income (L42 - L44)	\$ (157,698)		\$ 235,349	
46	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
47	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
48	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
49	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
50	Federal Tax on All Income (\$0 -\$10,000,000) @ 34%	\$ (53,617)		\$ 80,019	
51	Total Federal Income Tax	\$ (53,617)		\$ 80,019	
52	Combined Federal and State Income Tax (L44 + L51)	\$ (65,429)		\$ 97,646	
53	Applicable Federal Income Tax Rate [Col. [C], L51 - Col. [A], L51] / [Col. [C], L45 - Col. [A], L45]			34.0000%	
<u>Calculation of Interest Synchronization:</u>					
54	Rate Base (Schedule CSB-3, Col. (C), Line 14	\$ 2,251,164			
55	Weighted Average Cost of Debt	1.3000%			
56	Synchronized Interest (L45 X L46)	\$ 29,265			

RATE BASE - ORIGINAL COST

LINE NO.	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	\$ 4,016,878	\$ 4,016,878
2	Less: Accumulated Depreciation	(1,228,047)	(1,228,047)
3	Net Plant in Service	\$ 2,788,831	\$ 2,788,831
<u>LESS:</u>			
4	Advances in Aid of Construction (AIAC)	\$ 618,488	\$ 618,488
5	Service Line and Meter Advances	\$ -	\$ -
6	Contributions in Aid of Construction (CIAC)	\$ -	\$ -
7	Less: Accumulated Amortization	-	-
8	Net CIAC	\$ -	\$ -
9	Total Advances and Contributions	\$ 618,488	\$ 618,488
10	Customer Deposits	\$ 6,985	\$ 6,985
11	Accumulated Deferred Income Taxes	\$ -	\$ -
<u>ADD:</u>			
12	Deferred Tax Assets	\$ 87,806	\$ 87,806
13	Working Capital	\$ -	\$ -
14	Total Rate Base	\$ 2,251,164	\$ 2,251,164

References:

Column [A], Company Schedule B-1, Page 1
Column [B]: Schedule CSB-4
Column [C]: Column [A] + Column [B]

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	PLANT IN SERVICE	[A]	[B]	[C]
	Acct. No. Plant Description	COMPANY AS FILED		STAFF AS ADJUSTED
1				
2	303 Land and Land Rights	\$ 18,100	\$ -	\$ 18,100
3	304 Structures and Improvements	197,952	-	197,952
4	306 Lake, River, and Other Intakes	-	-	-
5	307 Wells and Springs	1,622,446	-	1,622,446
6	309 Supply Mains	2,118	-	2,118
7	310 Power Generation Equipment	10,751	-	10,751
8	311 Pumping Equipment	492,405	-	492,405
9	320 Water Treatment Equipment	263,210	-	263,210
10	330 Distribution Reservoirs and Standpipes	265,882	-	265,882
11	331 Transmission and Distribution Mains	620,830	-	620,830
12	333 Services	95,359	-	95,359
13	334 Meters and Meter Installations	220,733	-	220,733
14	335 Hydrants	37,179	-	37,179
15	336 Backflow Prevention Devices	1,024	-	1,024
16	339 Other Plant and Miscellaneous Equipment	19,311	-	19,311
17	340 Office Furniture and Equipment	22,526	-	22,526
18	341 Transportation Equipment	20,846	-	20,846
19	343 Tools, Shop, and Garage Equipment	42,909	-	42,909
20	344 Laboratory Equipment	9,508	-	9,508
21	345 Power Operated Equipment	38,925	-	38,925
22	346 Communication Equipment	2,654	-	2,654
23	347 Miscellaneous Equipment	8,273	-	8,273
24	348 Other Tangible Equipment	3,937	-	3,937
25	Total Plant in Service - Actual	\$ 4,016,878	\$ -	\$ 4,016,878
31	Less: Accumulated Depreciation	\$ (1,228,047)	\$ -	(1,228,047)
33	Net Plant in Service	\$ 2,788,831	\$ -	\$ 2,788,831
35	<u>LESS:</u>			
36	Advances in Aid of Construction (AIAC)	\$ 618,488	\$ -	\$ 618,488
38	Service Line and Meter Advances	\$ -	-	\$ -
40	Contributions in Aid of Construction (CIAC)	\$ -	-	\$ -
41	Less: CIAC - Pro Forma	-	-	-
42	Total CIAC - Adjusted	\$ -	\$ -	\$ -
44	Less: Accumulated Amortization	\$ -	-	\$ -
45	Less: Accumulated Amort - Pro Forma	-	-	-
46		\$ -	\$ -	\$ -
48	Net CIAC	\$ -	-	\$ -
50	Total Advances and Net Contributions	\$ 618,488	-	\$ 618,488
52	Customer Deposits	\$ 6,985	-	\$ 6,985
54	Deferred Tax Liability	\$ -	-	\$ -
56	<u>ADD:</u>			
57	Deferred Tax Asset	\$ 87,806	-	\$ 87,806
58	Working Capital Allowance	\$ -	-	\$ -
59	Total Rate Base	\$ 2,251,164	\$ -	\$ 2,251,164

OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	ADJ NO.	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
REVENUES:							
1	Metered Water Sales	\$ 453,784	\$ -		\$ 453,784	\$ 428,289	\$ 882,073
2	Water Sales - Unmetered	-	-		-	-	-
3	Other Operating Revenues	19,743	-		19,743	-	19,743
4	Total Revenues	\$ 473,527	\$ -		\$ 473,527	\$ 428,289	\$ 901,816
EXPENSES:							
7	Salaries and Wages - Employees	\$ 226,369	\$ (226,369)	1	\$ -	\$ -	\$ -
8	Employee Pensions and Benefits	50,965	(50,965)	1	-	-	-
9	Purchased Water	-	-		-	-	-
10	Purchased Power	33,567	-		33,567	-	33,567
11	Fuel for Power Production	-	-		-	-	-
12	Chemicals	18,049	-		18,049	-	18,049
13	Materials and Supplies - Acct No. 620	18,697	-		18,697	-	18,697
14	Materials and Supplies - Acct No. 620.08	41,492	(21,759)	2	19,733	-	19,733
15	Contractual Services - Management Fees	-	255,962	1,3	255,962	-	255,962
16	Contractual Services - Testing	5,401	-		5,401	-	5,401
17	Contractual Services - Other	12,787	-		12,787	-	12,787
18	Rental of Building/Real Property	9,185	-		9,185	-	9,185
19	Rental of Equipment	-	-		-	-	-
20	Transportation Expense	13,076	-		13,076	-	13,076
21	Insurance - General Liability	5,119	-		5,119	-	5,119
22	Insurance - Other	1,072	-		1,072	-	1,072
23	Advertising Expense	-	-		-	-	-
24	Rate Case Expense	5,333	-		5,333	-	5,333
25	Bad Debt Expense	4,735	(3,948)	4	787	-	787
26	Miscellaneous Expense	10,257	-		10,257	-	10,257
27	Depreciation Expense	185,697	-		185,697	-	185,697
28	Taxes Other Than Income-Utility Regulatory	140	-		140	-	140
29	Taxes Other Than Income-Property Taxes	-	18,910	5	18,910	5,803	24,713
30	Taxes Other Than Income-Other	-	-		-	-	-
31	Income Taxes	(72,955)	7,526	6	(65,429)	163,075	97,646
32	Total Operating Expenses	\$ 568,986	\$ (20,643)		\$ 548,343	\$ 168,878	\$ 717,221
33							
34	Operating Income (Loss)	\$ (95,459)	\$ 20,643		\$ (74,816)	\$ 259,411	\$ 184,595

References:

Column (A): Company Schedule C-1, Page 2
Column (B): Schedule CSB-8
Column (C): Column (A) + Column (B)
Column (D): Schedules CSB-1 and CSB-2
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 Salaries, Wages Pensions, & Benefits	[C] ADJ #2 Materials & Supplies	[D] ADJ #3 Contract Services Management Fees	[E] ADJ #4 Bad Debt Expense	[F] ADJ #5 Property Tax Exp	[G] ADJ #6 Income Tax Expense	[H] STAFF ADJUSTED
		<u>REVENUES:</u>								
1		Metered Water Sales	\$ 453,784	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 453,784
2		Water Sales - Unmetered	-	-	-	-	-	-	-	-
3		Other Operating Revenues	19,743	-	-	-	-	-	-	19,743
4		Total Revenues	\$ 473,527	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 473,527
5										
		<u>OPERATING EXPENSES:</u>								
6		Salaries and Wages - Employees	\$ 226,369	(226,369)	-	-	-	-	-	-
7	601	Employee Pensions and Benefits	50,965	(50,965)	-	-	-	-	-	-
8	604	Purchased Water	-	-	-	-	-	-	-	-
9	610	Purchased Power	33,567	-	-	-	-	-	-	33,567
10	615	Fuel for Power Production	-	-	-	-	-	-	-	-
11	616	Chemicals	-	-	-	-	-	-	-	-
12	618	Materials and Supplies	18,049	-	-	-	-	-	-	18,049
13	620	Materials and Supplies	18,697	-	-	-	-	-	-	18,697
14	620.08	Materials and Supplies	41,492	-	(21,759)	-	-	-	-	19,733
15	634	Contractual Services - Management Fees	-	-	-	(21,372)	-	-	-	255,962
16	635	Contractual Services - Testing	5,401	277,334	-	-	-	-	-	5,401
17	636	Contractual Services - Other	12,787	-	-	-	-	-	-	12,787
18	641	Rental of Building/Real Property	9,185	-	-	-	-	-	-	9,185
19	642	Rental of Equipment	-	-	-	-	-	-	-	-
20	650	Transportation Expense	13,076	-	-	-	-	-	-	13,076
21	657	Insurance - General Liability	5,119	-	-	-	-	-	-	5,119
22	659	Insurance - Other	1,072	-	-	-	-	-	-	1,072
23	660	Advertising Expense	-	-	-	-	-	-	-	-
24	667	Rate Case Expense	5,333	-	-	-	-	-	-	5,333
25	670	Bad Debt Expense	4,735	-	-	-	(3,948)	-	-	787
26	675	Miscellaneous Expense	10,257	-	-	-	-	-	-	10,257
27	403	Depreciation Expense	185,697	-	-	-	-	-	-	185,697
28	408	Taxes Other Than Income-Utility Regulatory	140	-	-	-	-	-	-	140
29	408.11	Taxes Other Than Income-Property Taxes	-	-	-	-	-	18,910	-	18,910
30	408.13	Taxes Other Than Income-Other	-	-	-	-	-	-	-	-
31	409	Income Taxes	(72,955)	-	-	-	-	-	7,526	(65,429)
32		Total Operating Expenses	\$ 568,986	\$ -	\$ (21,759)	\$ (21,372)	\$ (3,948)	\$ 18,910	\$ 7,526	\$ 548,343
33										
34		Operating Income (Loss)	\$ (95,459)	\$ -	\$ 21,759	\$ 21,372	\$ 3,948	\$ (18,910)	\$ (7,526)	\$ (74,816)

OPERATING INCOME ADJUSTMENT NO. 1 - SALARIES, WAGES, PENSIONS, & BENEFITS

LINE NO.	Description	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Salaries and Wage Expense	\$ 226,369	\$ (226,369)	\$ -
2	Pension and Benefits	50,965	\$ (50,965)	\$ -
3		\$ 277,334	\$ (277,334)	\$ -
4				
5	Contractual Services - Management Fees	\$ -	\$ 277,334	\$ 277,334

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 2 - MATERIALS AND SUPPLIES, ACCT NO. 620.08

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Materials and Supplies, Acct No 620.08	41,492	\$ (21,759)	\$ 19,733
2				
3				
4				
5				
6				
7		2006	\$ 17,706	Company Sch E-2
8		2007	\$ -	Company Sch E-2
9		2008	\$ 41,492	Company Sch E-2
10			\$ 59,198	
11		Divided by 3	3	
12			\$ 19,733	

Materials and Supplies Acct No. 620.08
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References:

Column A: Company Schedule C-1 & E-2
Column B: Testimony, CSB; Data Request CSB 15-1
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 3 - CONTRACTUAL SERVICES, MANAGEMENT FEES

LINE NO.	DESCRIPTION	[A]		[B]		[C]	
		COMPANY AS FILED		STAFF ADJUSTMENTS		STAFF AS ADJUSTED	
1	Contractual Services - Management Fees	\$	-	\$	(21,372)	\$	(21,372)
2							
3							
4	Bonuses (Direct Allocation)		13,358	From Trial Balance			
5	Kitchen Supplies		851	From Trial Balance			
6		\$	14,209				
7							
8	Employee Moving & Hiring	\$	314	From Trial Balance			
9	Employee Training & Certification		894	From Trial Balance			
10	Employee Travel		11,471	From Trial Balance			
11	Employee Meals		1,647	From Trial Balance			
12			14,326				
13	Divided by 2 years		2				
14		\$	7,163				
15							
16	Total (Line 6 + Line 14)	\$	21,372				

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB; Data Request CSB 2-30
Column C: Column [A] + Column [B]

Willow Valley Water Company, Inc.
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Schedule CSB-10

OPERATING INCOME ADJUSTMENT NO. 4 - BAD DEBT EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Bad Debt Expense	4,735	(3,948)	787

References:

Column A: Company Data Request Response CSB 1.26 & RUCO 2.04(e)
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Willow Valley Water Company, Inc.
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Test Year Ended December 31, 2008

Schedule CSB-11

OPERATING INCOME ADJUSTMENT No. 5 - Property Tax Expense

LINE NO.	Property Tax Calculation	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	\$ 473,527	\$ 473,527
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	947,054	\$ 947,054
4	Staff Recommended Revenue, Per Schedule CSB-1	473,527	\$ 901,816
5	Subtotal (Line 4 + Line 5)	1,420,581	1,848,870
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	473,527	\$ 616,290
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	947,054	\$ 1,232,580
10	Plus: 10% of CWIP -	47	47
11	Less: Net Book Value of Licensed Vehicles	16,677	\$ 16,677
12	Full Cash Value (Line 9 + Line 10 - Line 11)	930,424	\$ 1,215,950
13	Assessment Ratio	21.0%	21.0%
14	Assessment Value (Line 12 * Line 13)	195,389	\$ 255,350
15	Composite Property Tax Rate	9.6781%	9.6781%
			\$ -
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$ 18,910	
17	Company Proposed Property Tax	-	
18	Staff Test Year Adjustment (Line 16-Line 17)	\$ 18,910	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$ 24,713
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		\$ 18,910
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		\$ 5,803
22	Increase to Property Tax Expense		\$ 5,803
23	Increase in Revenue Requirement		428,289
24	Increase to Property Tax per Dollar Increase in Revenue (Line 19/Line 20)		1.354934%

Willow Valley Water Company, Inc.
Docket No. W-01732A-09-0079
Test Year Ended December 31, 2008

Schedule CSB-12

OPERATING INCOME ADJUSTMENT NO. 6 - INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Income Tax Expense - Test Year	(72,955)	7,526	(65,429)

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

REVENUE REQUIREMENT

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>[A] COMPANY ORIGINAL COST</u>	<u>[B] STAFF ORIGINAL COST</u>
1	Adjusted Rate Base	\$ 4,240,018	\$ 4,240,018
2	Adjusted Operating Income (Loss)	\$ (601,944)	\$ (501,654)
3	Current Rate of Return (L2 / L1)	-14.20%	-11.83%
4	Required Rate of Return	9.56%	8.70%
5	Required Operating Income (L4 * L1)	\$ 405,346	\$ 368,882
6	Operating Income Deficiency (L5 - L2)	\$ 1,007,290	\$ 870,536
7	Gross Revenue Conversion Factor	1.64509	1.65332
8	Increase (Decrease) In Gross Revenue (L7 * L6)	\$ 1,657,078	\$ 1,439,278
9	Adjusted Test Year Revenue	\$ 2,894,421	\$ 3,037,462
10	Proposed Annual Revenue (L8 + L9)	\$ 4,551,499	\$ 4,476,740
11	Required Increase/Decrease in Revenue (%) (L8/L9)	57.25%	47.38%

References:

Column [A]: Company Schedules A-1, C-1, C-3, & D-1
Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-5

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
<u>Calculation of Gross Revenue Conversion Factor:</u>					
1	Revenue	100.0000%			
2	Uncollectible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.5158%			
5	Subtotal (L3 - L4)	60.4842%			
6	Revenue Conversion Factor (L1 / L5)	1.653325			
<u>Calculation of Uncollectible Factor:</u>					
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	38.5989%			
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0.0000%			
<u>Calculation of Effective Tax Rate:</u>					
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.9680%			
14	Federal Taxable Income (L12 - L13)	93.0320%			
15	Applicable Federal Income Tax Rate (Line 53)	34.0000%			
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%			
17	Combined Federal and State Income Tax Rate (L13 + L16)		38.5989%		
<u>Calculation of Effective Property Tax Factor</u>					
18	Unity	100.0000%			
19	Combined Federal and State Income Tax Rate (L17)	38.5989%			
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%			
21	Property Tax Factor (CSB-12, Col B, L24)	1.4933%			
22	Effective Property Tax Factor (L20*L21)		0.9169%		
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.5158%	
24	Required Operating Income (Schedule CSB-1, Line 5)	\$ 368,882			
25	Adjusted Test Year Operating Income (Loss) (Schedule CSB-5, Col C, L 34)	(501,654)			
26	Required Increase in Operating Income (L24 - L25)		\$ 870,536		
27	Income Taxes on Recommended Revenue (Col. [C], L52)	\$ 173,252			
28	Income Taxes on Test Year Revenue (Col. [B], L52)	(373,996)			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		547,249		
30	Recommended Revenue Requirement (Schedule CSB-1, Line 10)	\$ 4,476,740			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L30*L31)	\$ -			
33	Adjusted Test Year Uncollectible Expense	\$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)		-		
35	Property Tax with Recommended Revenue (CSB-12, Col B, L19)	\$ 164,729			
36	Property Tax on Test Year Revenue (CSB-12, Col A, L16)	143,236			
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		21,493		
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)		\$ 1,439,278		
<u>Calculation of Income Tax:</u>					
39	Revenue (Schedule CSB-5)	\$ 3,037,462	\$ 1,439,278	\$ 4,476,740	
40	Operating Expenses Excluding Income Taxes	\$ 3,913,112	\$ 21,493	\$ 3,934,606	
41	Synchronized Interest (L56)	\$ 93,280		\$ 93,280	
42	Arizona Taxable Income (L39 - L40 - L41)	\$ (968,931)		\$ 448,854	
43	Arizona State Income Tax Rate	6.9680%		6.9680%	
44	Arizona Income Tax (L42 x L43)	\$ (67,515)		\$ 31,276	
45	Federal Taxable Income (L42 - L44)	\$ (901,416)		\$ 417,578	
46	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
47	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
48	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
49	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
50	Federal Tax on All Income (\$0 - \$10,000,000) @ 34%	\$ (306,481)		\$ 141,976	
51	Total Federal Income Tax	\$ (306,481)		\$ 141,976	
52	Combined Federal and State Income Tax (L44 + L51)	\$ (373,996)		\$ 173,252	
53	Applicable Federal Income Tax Rate [Col. [C], L51 - Col. [A], L51] / [Col. [C], L45 - Col. [A], L45]			34.0000%	
<u>Calculation of Interest Synchronization:</u>					
54	Rate Base (Schedule CSB-3, Col. (C), Line 14)	\$ 4,240,018			
55	Weighted Average Cost of Debt	2.2000%			
56	Synchronized Interest (L45 X L46)	\$ 93,280			

RATE BASE - ORIGINAL COST

LINE NO.	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	\$ 45,877,421	\$ 45,877,421
2	Less: Accumulated Depreciation	(3,071,499)	(3,071,499)
3	Net Plant in Service	\$ 42,805,922	\$ 42,805,922
<u>LESS:</u>			
4	Advances in Aid of Construction (AIAC)	\$ 37,992,781	\$ 37,992,781
5	Service Line and Meter Advances	\$ -	\$ -
6	Contributions in Aid of Construction (CIAC)	\$ 890,221	\$ 890,221
7	Less: Accumulated Amortization	98,283	98,283
8	Net CIAC	\$ 791,938	\$ 791,938
9	Total Advances and Contributions	\$ 38,784,719	\$ 38,784,719
10	Customer Deposits	\$ 162,132	\$ 162,132
11	Accumulated Deferred Income Taxes	\$ -	\$ -
<u>ADD:</u>			
12	Deferred Tax Assets	\$ 380,947	\$ 380,947
13	Working Capital	\$ -	\$ -
14	Total Rate Base	\$ 4,240,018	\$ 4,240,018

References:

Column [A], Company Schedule B-1, Page 1
Column [B]: Schedule CSB-4
Column [C]: Column [A] + Column [B]

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	PLANT IN SERVICE	[A]	[B]	[C]
	Acct. No. Plant Description	COMPANY AS FILED		STAFF AS ADJUSTED
1				
2	303 Land and Land Rights	\$ 148,446	\$ -	\$ 148,446
3	304 Structures and Improvements	945,383	-	945,383
4	306 Lake, River, and Other Intakes	-	-	-
5	307 Wells and Springs	775,544	-	775,544
6	309 Supply Mains	-	-	-
7	310 Power Generation Equipment	20,612	-	20,612
8	311 Pumping Equipment	7,803,214	-	7,803,214
9	320 Water Treatment Equipment	3,892,532	-	3,892,532
10	330 Distribution Reservoirs and Standpipes	3,439,680	-	3,439,680
11	331 Transmission and Distribution Mains	19,407,008	-	19,407,008
12	333 Services	2,795,075	-	2,795,075
13	334 Meters and Meter Installations	1,562,332	-	1,562,332
14	335 Hydrants	1,900,270	-	1,900,270
15	336 Backflow Prevention Devices	12,674	-	12,674
16	339 Other Plant and Miscellaneous Equipment	114,439	-	114,439
17	340 Office Furniture and Equipment	46,206	-	46,206
18	341 Transportation Equipment	275,038	-	275,038
19	343 Tools, Shop, and Garage Equipment	90,582	-	90,582
20	344 Laboratory Equipment	42,171	-	42,171
21	345 Power Operated Equipment	55,588	-	55,588
22	346 Communication Equipment	20,584	-	20,584
23	347 Miscellaneous Equipment	15,371	-	15,371
24	348 Other Tangible Equipment	2,514,672	-	2,514,672
25	Total Plant in Service - Actual	\$ 45,877,421	\$ -	\$ 45,877,421
31	Less: Accumulated Depreciation	\$ (3,071,499)	\$ -	(3,071,499)
33	Net Plant in Service	\$ 42,805,922	\$ -	\$ 42,805,922
35	<u>LESS:</u>			
36	Advances in Aid of Construction (AIAC)	\$ 37,992,781	\$ -	\$ 37,992,781
38	Service Line and Meter Advances	\$ -	-	\$ -
40	Contributions in Aid of Construction (CIAC)	\$ 890,221	-	\$ 890,221
41	Less: CIAC - Pro Forma	-	-	-
42	Total CIAC - Adjusted	\$ 890,221	\$ -	\$ 890,221
44	Less: Accumulated Amortization	\$ 98,283	-	\$ 98,283
45	Less: Accumulated Amort - Pro Forma	-	-	-
46		\$ 98,283	\$ -	\$ 98,283
48	Net CIAC	\$ 791,938	-	\$ 791,938
50	Total Advances and Net Contributions	\$ 38,784,719	-	\$ 38,784,719
52	Customer Deposits	\$ 162,132	-	\$ 162,132
54	Deferred Tax Liability	\$ -	-	\$ -
56	<u>ADD:</u>			
57	Deferred Tax Asset	\$ 380,947	-	\$ 380,947
58	Working Capital Allowance	\$ -	-	\$ -
59	Total Rate Base	\$ 4,240,018	\$ -	\$ 4,240,018

OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	ADJ NO.	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
<u>REVENUES:</u>							
1	Metered Water Sales	\$ 2,659,938	\$ 143,041	1	\$ 2,802,979	\$ 1,439,278	\$ 4,242,257
2	Water Sales - Unmetered	-	-		-		-
3	Other Operating Revenues	234,483	-		234,483	-	234,483
4	Total Revenues	\$ 2,894,421	\$ 143,041		\$ 3,037,462	\$ 1,439,278	\$ 4,476,740
<u>EXPENSES:</u>							
7	Salaries and Wages - Employees	\$ 670,808	\$ (670,808)	2	\$ -	\$ -	\$ -
8	Employee Pensions and Benefits	143,080	(143,080)	2	-		-
9	Purchased Water	-	-		-		-
10	Purchased Power	291,613	16,356	1	307,969		307,969
11	Fuel for Power Production	-	-		-		-
12	Chemicals	143,618	8,519	1	152,137		152,137
13	Materials and Supplies - Acct No. 620	31,821	-		31,821		31,821
14	Materials and Supplies - Acct No. 620.08	128,737	(69,726)	3	59,011		59,011
15	Contractual Services - Management Fees	-	752,255	2,4	752,255		752,255
16	Contractual Services - Testing	33,729	-		33,729		33,729
17	Contractual Services - Other	41,898	-		41,898		41,898
18	Rental of Building/Real Property	37,473	-		37,473		37,473
19	Rental of Equipment	4,239	-		4,239		4,239
20	Transportation Expense	67,812	-		67,812		67,812
21	Insurance - General Liability	17,098	-		17,098		17,098
22	Insurance - Other	3,336	-		3,336		3,336
23	Advertising Expense	-	-		-		-
24	Rate Case Expense	18,667	-		18,667		18,667
25	Bad Debt Expense	28,944	(22,527)	5	6,417		6,417
26	Miscellaneous Expense	28,042	-		28,042		28,042
27	Depreciation Expense	2,199,986	-		2,199,986		2,199,986
28	Taxes Other Than Income-Utility Regulatory	5,885	-		5,885		5,885
29	Taxes Other Than Income-Property Taxes	-	143,236	6	143,236	21,493	164,729
30	Taxes Other Than Income-Other	2,101	-		2,101		2,101
31	Income Taxes	(402,522)	28,526	7	(373,996)	547,249	173,252
32	Total Operating Expenses	\$ 3,496,365	\$ 42,751		\$ 3,539,116	\$ 568,742	\$ 4,107,858
33							
34	Operating Income (Loss)	\$ (601,944)	\$ 100,290		\$ (501,654)	\$ 870,536	\$ 368,882

References:

Column (A): Company Schedule C-1, Page 2
Column (B): Schedule CSB-8
Column (C): Column (A) + Column (B)
Column (D): Schedules CSB-1 and CSB-2
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 Revenue and Expense Annualization	[C] ADJ #2 Salaries, Wages Pensions, & Benefits	[D] ADJ #3 Materials & Supplies	[F] ADJ #4 Contract Svcs Management Fees	[G] ADJ #5 Bad Debt Expense	[H] ADJ #6 Property Tax Exp	[J] ADJ #7 Income Tax Expense	[J] STAFF ADJUSTED
		<u>REVENUES:</u>									
1		Metered Water Sales	\$ 2,659,938	\$ 143,041							\$ 2,802,979
2		Water Sales - Unmetered	-	-							-
3		Other Operating Revenues	-	-							-
4		Total Revenues	\$ 2,894,421	\$ 143,041							\$ 3,037,462
5											
		<u>OPERATING EXPENSES:</u>									
6		Salaries and Wages - Employees	\$ 670,808	-	(670,808)						-
7	601	Employee Pensions and Benefits	143,080	-	(143,080)						-
8	604		-	-	-						-
9	610	Purchased Water	-	-	-						-
10	615	Purchased Power	291,613	16,356	-						307,969
11	616	Fuel for Power Production	-	-	-						-
12	618	Chemicals	143,618	8,519	-						152,137
13	620	Materials and Supplies	31,821	-	-						31,821
14	620.08	Materials and Supplies	128,737	-	-	(69,726)					59,011
15	634	Contractual Services - Management Fees	-	-	813,888	-	(61,633)				752,255
16	635	Contractual Services - Testing	33,729	-	-	-	-				33,729
17	636	Contractual Services - Other	41,898	-	-	-	-				41,898
18	641	Rental of Building/Real Property	37,473	-	-	-	-				37,473
19	642	Rental of Equipment	4,239	-	-	-	-				4,239
20	650	Transportation Expense	67,812	-	-	-	-				67,812
21	657	Insurance - General Liability	17,098	-	-	-	-				17,098
22	659	Insurance - Other	3,336	-	-	-	-				3,336
23	660	Advertising Expense	-	-	-	-	-				-
24	667	Rate Case Expense	18,667	-	-	-	-				18,667
25	670	Bad Debt Expense	28,944	-	-	-	-	(22,527)			6,417
26	675	Miscellaneous Expense	28,042	-	-	-	-	-			28,042
27	403	Depreciation Expense	2,199,986	-	-	-	-	-			2,199,986
28	408	Taxes Other Than Income-Utility Regulatory	5,885	-	-	-	-	-			5,885
29	408.11	Taxes Other Than Income-Property Taxes	-	-	-	-	-	-	143,236		143,236
30	408.13	Taxes Other Than Income-Other	2,101	-	-	-	-	-	-		2,101
31	409	Income Taxes	(402,522)	-	-	-	-	-	-	28,526	(373,996)
32		Total Operating Expenses	\$ 3,496,365	\$ 24,875	\$ -	\$ (69,726)	\$ (61,633)	\$ (22,527)	\$ 143,236	\$ 28,526	\$ 3,539,116
33											
34		Operating Income (Loss)	\$ (601,944)	\$ 118,166	\$ -	\$ 69,726	\$ 61,633	\$ 22,527	\$ (143,236)	\$ (28,526)	\$ (501,654)

OPERATING INCOME ADJUSTMENT NO. 1 - REVENUE AND EXPENSE ANNUALIZATION

LINE NO.	Description	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Metered Water Sales - Actual	\$ 2,805,048	\$ -	\$ 2,805,048
2	Unbilled Revenue	(2,069)	-	(2,069)
3	Revenue Annualization to Metered Water Sales	(143,041)	143,041	-
4	Total	\$ 2,659,938	\$ 143,041	\$ 2,802,979
5				
6	Purchased Pumping Power - Actual	\$ 297,842	\$ -	\$ 297,842
7	APS Interim Rate Increase	10,127	-	10,127
8	Annualization Adjustment to Pumping Power	(16,356)	16,356	-
9		\$ 291,613	\$ 16,356	\$ 307,969
10				
11	Chemicals - Actual	\$ 152,137	\$ -	\$ 152,137
12	Annualization Adjustment to Chemicals	(8,519)	8,519	
13		\$ 143,618	\$ 8,519	\$ 152,137
14				
15	Operating Income	\$ 2,224,707	\$ 118,166	\$ 2,342,873

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 2 - SALARIES, WAGES, PENSIONS, & BENEFITS

LINE NO.	Description	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Salaries and Wage Expense	\$ 670,808	\$ (670,808)	\$ -
2	Pension and Benefits	143,080	(143,080)	-
3		\$ 813,888	\$ (813,888)	\$ -
4				
5	Contractual Services - Management Fees	\$ -	\$ 813,888	\$ 813,888

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

		(A)	(B)	(C)
LINE NO.	DESCRIPTION	COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Materials and Supplies, Acct No 620.08	128,737	\$ (69,726)	\$ 59,011
2				
3				
4				
5				
6				
7		2006	\$ 48,296	Company Sch E-2
8		2007	\$ -	Company Sch E-2
9		2008	\$ 128,737	Company Sch E-2
10			\$ 177,033	
11		Divided by 3	3	
12			\$ 59,011	

Column A: Company Schedule C-1 & E-2
Column B: Testimony, CSB; Data Request CSB 15-1
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 4 - CONTRACTUAL SERVICES, MANAGEMENT FEES

LINE NO.	DESCRIPTION	[A]		[B]		[C]	
		COMPANY AS FILED		STAFF ADJUSTMENTS		STAFF AS ADJUSTED	
1	Contractual Services - Management Fees	\$	-	\$	(61,633)	\$	(61,633)
2							
3							
4							
5	Bonuses (Indirect Allocation)	\$	6,318	Data Request Response CSB 2-30			
6	Bonuses (Direct Allocation)		18,577	From Trial Balance			
7	Kitchen Supplies		3,624	From Trial Balance			
8		\$	28,520				
9							
10	Employee Moving & Hiring	\$	402	From Trial Balance			
11	Employee Training & Certification		7,050	From Trial Balance			
12	Employee Travel		54,000	From Trial Balance			
13	Employee Meals		4,774	From Trial Balance			
14			66,226				
15	Divided by 2 years		2				
16		\$	33,113				
17							
18	Total (Line 8 + Line 16)	\$	61,633				

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB; Data Request CSB 2-30
Column C: Column [A] + Column [B]

Valencia Water Company - Town Division
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Test Year Ended December 31, 2008

Schedule CSB-11

OPERATING INCOME ADJUSTMENT NO. 5 - BAD DEBT EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Bad Debt Expense	28,944	(22,527)	6,417

References:

Column A: Company Data Request Response CSB 1.26 & RUCO 2.04(e)
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 6 - PROPERTY TAX EXPENSE

LINE NO.	Property Tax Calculation	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	\$ 3,037,462	\$ 3,037,462
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	6,074,924	\$ 6,074,924
4	Staff Recommended Revenue, Per Schedule CSB-1	3,037,462	\$ 4,476,740
5	Subtotal (Line 4 + Line 5)	9,112,386	10,551,664
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	3,037,462	\$ 3,517,221
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	6,074,924	\$ 7,034,443
10	Plus: 10% of CWIP -	415,844	415,844
11	Less: Net Book Value of Licensed Vehicles	96,323	\$ 96,323
12	Full Cash Value (Line 9 + Line 10 - Line 11)	6,394,445	\$ 7,353,963
13	Assessment Ratio	21.0%	21.0%
14	Assessment Value (Line 12 * Line 13)	1,342,833	\$ 1,544,332
15	Composite Property Tax Rate	10.6667%	10.6667%
			\$ -
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$ 143,236	
17	Company Proposed Property Tax	-	
18	Staff Test Year Adjustment (Line 16-Line 17)	\$ 143,236	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$ 164,729
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		\$ 143,236
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		\$ 21,493
22	Increase to Property Tax Expense		\$ 21,493
23	Increase in Revenue Requirement		1,439,278
24	Increase to Property Tax per Dollar Increase in Revenue (Line 19/Line 20)		1.493338%

Valencia Water Company - Town Division
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Schedule CSB-13

OPERATING INCOME ADJUSTMENT NO. 7 - INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Income Tax Expense - Test Year	(402,522)	28,526	(373,996)

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	[A] COMPANY ORIGINAL COST	[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	\$ 929,057	\$ 929,057
2	Adjusted Operating Income (Loss)	\$ (4,402)	\$ 31,536
3	Current Rate of Return (L2 / L1)	-0.47%	3.39%
4	Required Rate of Return	9.72%	8.10%
5	Required Operating Income (L4 * L1)	\$ 90,304	\$ 75,254
6	Operating Income Deficiency (L5 - L2)	\$ 94,706	\$ 43,717
7	Gross Revenue Conversion Factor	1.64509	1.65286
8	Increase (Decrease) In Gross Revenue (L7 * L6)	\$ 155,800	\$ 72,258
9	Adjusted Test Year Revenue	\$ 336,819	\$ 380,474
10	Proposed Annual Revenue (L8 + L9)	\$ 492,619	\$ 452,732
11	Required Increase/Decrease in Revenue (%) (L8/L9)	46.26%	18.99%

References:

Column [A]: Company Schedules A-1, C-1, C-3, & D-1
Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-5

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
<u>Calculation of Gross Revenue Conversion Factor:</u>					
1	Revenue	100.0000%			
2	Uncollectible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.4988%			
5	Subtotal (L3 - L4)	60.5012%			
6	Revenue Conversion Factor (L1 / L5)	1.652861			
<u>Calculation of Uncollectible Factor:</u>					
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	38.5989%			
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0.0000%			
<u>Calculation of Effective Tax Rate:</u>					
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.9680%			
14	Federal Taxable Income (L12 - L13)	93.0320%			
15	Applicable Federal Income Tax Rate (Line 53)	34.0000%			
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%			
17	Combined Federal and State Income Tax Rate (L13 + L16)	38.5989%			
<u>Calculation of Effective Property Tax Factor</u>					
18	Unity	100.0000%			
19	Combined Federal and State Income Tax Rate (L17)	38.5989%			
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%			
21	Property Tax Factor (CSB-13, Col. B, L24)	1.4657%			
22	Effective Property Tax Factor (L20*L21)	0.9000%			
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)	39.4988%			
24	Required Operating Income (Schedule CSB-1, Line 5)	\$ 75,254			
25	Adjusted Test Year Operating Income (Loss) (Sch CSB-5, Line 34)	31,536			
26	Required Increase in Operating Income (L24 - L25)	\$ 43,717			
27	Income Taxes on Recommended Revenue (Col. [C], L52)	\$ 26,282			
28	Income Taxes on Test Year Revenue (Col. [B], L52)	(1,200)			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)	27,482			
30	Recommended Revenue Requirement (Schedule CSB-1, Line 10)	\$ 452,732			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L30*L31)	\$ -			
33	Adjusted Test Year Uncollectible Expense	\$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)	-			
35	Property Tax with Recommended Revenue (CSB-13, Col B, L16)	\$ 18,074			
36	Property Tax on Test Year Revenue (CSB-13, Col A, L18)	17,015			
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)	1,059			
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)	\$ 72,258			
<u>Calculation of Income Tax:</u>					
39	Revenue (Schedule CSB-5)	\$ 380,474	\$ 72,258	\$ 452,732	
40	Operating Expenses Excluding Income Taxes	\$ 350,138	\$ 1,059	\$ 351,197	
41	Synchronized Interest (L56)	\$ 33,446		\$ 33,446	
42	Arizona Taxable Income (L39 - L40 - L41)	\$ (3,110)		\$ 68,089	
43	Arizona State Income Tax Rate	6.9680%		6.9680%	
44	Arizona Income Tax (L42 x L43)	\$ (217)		\$ 4,744	
45	Federal Taxable Income (L42 - L44)	\$ (2,893)		\$ 63,345	
46	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
47	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
48	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
49	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
50	Federal Tax on All Income (\$0 - \$10,000,000) @ 34%	\$ (984)		\$ 21,537	
51	Total Federal Income Tax	\$ (984)		\$ 21,537	
52	Combined Federal and State Income Tax (L44 + L51)	\$ (1,200)		\$ 26,282	
53	Applicable Federal Income Tax Rate [Col. [C], L51 - Col. [A], L51] / [Col. [C], L45 - Col. [A], L45]			34.0000%	
<u>Calculation of Interest Synchronization:</u>					
54	Rate Base (Schedule CSB-3, Col. (C), Line 17)	\$ 929,057			
55	Weighted Average Cost of Debt	3.6000%			
56	Synchronized Interest (L45 X L46)	\$ 33,446			

RATE BASE - ORIGINAL COST

LINE NO.	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	(C) STAFF AS ADJUSTED
1	Plant in Service	\$ 2,832,537	\$ 2,832,537
2	Less: Accumulated Depreciation	(898,484)	(898,484)
3	Net Plant in Service	<u>\$ 1,934,053</u>	<u>\$ 1,934,053</u>
<u>LESS:</u>			
4	Advances in Aid of Construction (AIAC)	\$ 747,555	\$ 747,555
5	Service Line and Meter Advances	\$ -	\$ -
6	Contributions in Aid of Construction (CIAC)	\$ 407,979	\$ 407,979
7	Less: Accumulated Amortization	71,396	71,396
8	Net CIAC	<u>\$ 336,583</u>	<u>\$ 336,583</u>
9	Total Advances and Contributions	\$ 1,084,138	\$ 1,084,138
10	Customer Deposits	\$ 11,080	\$ 11,080
11	Accumulated Deferred Income Taxes	\$ -	\$ -
<u>ADD:</u>			
12	Deferred Tax Assets	\$ 90,222	\$ 90,222
13	Working Capital	\$ -	\$ -
14	Total Rate Base	<u>\$ 929,057</u>	<u>\$ 929,057</u>

References:

Column [A], Company Schedule B-1, Page 1
Column [B]: Schedule CSB-4
Column [C]: Column [A] + Column [B]

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	PLANT IN SERVICE	[A]	[B]	[C]
	Acct. No. Plant Description	COMPANY AS FILED		STAFF AS ADJUSTED
2	303 Land and Land Rights	\$ 27,898	\$ -	\$ 27,898
3	304 Structures and Improvements	39,169	-	39,169
4	306 Lake, River, and Other Intakes	-	-	-
5	307 Wells and Springs	115,895	-	115,895
6	309 Supply Mains	-	-	-
7	310 Power Generation Equipment	-	-	-
8	311 Pumping Equipment	472,851	-	472,851
9	320 Water Treatment Equipment	729,148	-	729,148
10	330 Distribution Reservoirs and Standpipes	588,545	-	588,545
11	331 Transmission and Distribution Mains	712,346	-	712,346
12	333 Services	37,406	-	37,406
13	334 Meters and Meter Installations	35,389	-	35,389
14	335 Hydrants	40,757	-	40,757
15	336 Backflow Prevention Devices	5,432	-	5,432
16	339 Other Plant and Miscellaneous Equipment	4,284	-	4,284
17	340 Office Furniture and Equipment	-	-	-
18	341 Transportation Equipment	-	-	-
19	343 Tools, Shop, and Garage Equipment	1,650	-	1,650
20	344 Laboratory Equipment	-	-	-
21	345 Power Operated Equipment	-	-	-
22	346 Communication Equipment	4,225	-	4,225
23	347 Miscellaneous Equipment	10,089	-	10,089
24	348 Other Tangible Equipment	7,453	-	7,453
25	Total Plant in Service - Actual	\$ 2,832,537	\$ -	\$ 2,832,537
31	Less: Accumulated Depreciation	\$ (898,484)	\$ -	\$ (898,484)
33	Net Plant in Service	\$ 1,934,053	\$ -	\$ 1,934,053
35	<u>LESS:</u>			
36	Advances in Aid of Construction (AIAC)	\$ 747,555	\$ -	\$ 747,555
38	Service Line and Meter Advances	\$ -	-	\$ -
40	Contributions in Aid of Construction (CIAC)	\$ 407,979	-	\$ 407,979
41	Less: CIAC - Pro Forma	-	-	-
42	Total CIAC - Adjusted	\$ 407,979	\$ -	\$ 407,979
44	Less: Accumulated Amortization	\$ 71,396	-	\$ 71,396
45	Less: Accumulated Amort - Pro Forma	-	-	-
46		\$ 71,396	\$ -	\$ 71,396
48	Net CIAC	\$ 336,583	-	\$ 336,583
50	Total Advances and Net Contributions	\$ 1,084,138	-	\$ 1,084,138
52	Customer Deposits	\$ 11,080	-	\$ 11,080
54	Deferred Tax Liability	\$ -	-	\$ -
56	<u>ADD:</u>			
57	Deferred Tax Asset	\$ 90,222	-	\$ 90,222
58	Working Capital Allowance	\$ -	-	\$ -
59	Total Rate Base	\$ 929,057	\$ -	\$ 929,057

OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	ADJ NO.	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
REVENUES:							
1	Metered Water Sales	\$ 322,780	\$ 43,655	1	\$ 366,435	\$ 72,258	\$ 438,693
2	Water Sales - Unmetered	-	-		-	-	-
3	Other Operating Revenues	14,039	-		14,039	-	14,039
4	Total Revenues	\$ 336,819	\$ 43,655		\$ 380,474	\$ 72,258	\$ 452,732
EXPENSES:							
7	Salaries and Wages - Employees	\$ 76,217	\$ (76,217)	2	\$ -	\$ -	\$ -
8	Employee Pensions and Benefits	16,164	(16,164)	2	-	-	-
9	Purchased Water	52,085	-		52,085	-	52,085
10	Purchased Power	22,565	4,429	1	26,994	-	26,994
11	Fuel for Power Production	-	-		-	-	-
12	Chemicals	10,761	2,282	1	13,043	-	13,043
13	Materials and Supplies - Acct No. 620	4,236	-		4,236	-	4,236
14	Materials and Supplies - Acct No. 620.08	16,551	(10,466)	3	6,085	-	6,085
15	Contractual Services - Management Fees	-	84,549	2,4	84,549	-	84,549
16	Contractual Services - Testing	-	3,774	5	3,774	-	3,774
17	Contractual Services - Other	3,774	(3,774)	5	-	-	-
18	Rental of Building/Real Property	593	-		593	-	593
19	Rental of Equipment	3,686	-		3,686	-	3,686
20	Transportation Expense	56	-		56	-	56
21	Insurance - General Liability	9,876	-		9,876	-	9,876
22	Insurance - Other	2,073	-		2,073	-	2,073
23	Advertising Expense	-	-		-	-	-
24	Rate Case Expense	1,355	-		1,355	-	1,355
25	Bad Debt Expense	3,368	(2,214)	6	1,154	-	1,154
26	Miscellaneous Expense	6,644	-		6,644	-	6,644
27	Depreciation Expense	113,580	-		113,580	-	113,580
28	Taxes Other Than Income-Utility Regulatory	3,340	-		3,340	-	3,340
29	Taxes Other Than Income-Property Taxes	-	17,015	7	17,015	1,059	18,074
30	Taxes Other Than Income-Other	-	-		-	-	-
31	Income Taxes	(5,703)	4,503	8	(1,200)	27,482	26,282
32	Total Operating Expenses	\$ 341,221	\$ 7,717		\$ 348,938	\$ 28,541	\$ 377,479
33							
34	Operating Income (Loss)	\$ (4,402)	\$ 35,938		\$ 31,536	\$ 43,717	\$ 75,254

References:

Column (A): Company Schedule C-1, Page 2
Column (B): Schedule CSB-6
Column (C): Column (A) + Column (B)
Column (D): Schedules CSB-1 and CSB-2
Column (E): Column (C) + Column (D)

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 Revenue and Expense Annualization Ref Sch CSB-7	[C] ADJ #2 Salaries, Wages Pensions, & Benefits Ref. Sch CSB-8	[D] ADJ #3 Materials & Supplies Acct No. 620.08 Ref. Sch CSB-9	[F] ADJ #4 Contract Svcs Management Fees Ref. Sch CSB-10	[G] ADJ #5 Contract Svcs Water Testing Ref. Sch CSB-11	[H] ADJ #6 Bad Debt Expense Ref. Sch CSB-12	[I] ADJ #7 Property Tax Exp Ref. Sch CSB-13	[J] ADJ #8 Income Tax Expense Ref. Sch CSB-14	[K] STAFF ADJUSTED
1		REVENUES:										
2		Metered Water Sales	\$ 322,780	\$ 43,655	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 366,435
3		Water Sales - Unmetered	-	-	-	-	-	-	-	-	-	-
4		Other Operating Revenues	14,039	-	-	-	-	-	-	-	-	14,039
5		Total Revenues	\$ 336,819	\$ 43,655	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 380,474
6		OPERATING EXPENSES:										
7	601	Salaries and Wages - Employees	\$ 76,217	-	(76,217)	-	-	-	-	-	-	-
8	604	Employee Pensions and Benefits	16,164	-	(16,164)	-	-	-	-	-	-	-
9	610	Purchased Water	52,085	-	-	-	-	-	-	-	-	52,085
10	615	Purchased Power	22,565	4,429	-	-	-	-	-	-	-	26,994
11	616	Fuel for Power Production	-	-	-	-	-	-	-	-	-	-
12	618	Chemicals	10,761	2,282	-	-	-	-	-	-	-	13,043
13	620	Materials and Supplies	4,236	-	-	-	-	-	-	-	-	4,236
14	620.08	Materials and Supplies	16,551	-	(10,466)	-	-	-	-	-	-	6,085
15	634	Contractual Services - Management Fees	-	-	92,381	-	(7,832)	3,774	-	-	-	84,549
16	635	Contractual Services - Testing	-	-	-	-	-	(3,774)	-	-	-	3,774
17	636	Contractual Services - Other	3,774	-	-	-	-	-	-	-	-	593
18	641	Rental of Building/Real Property	593	-	-	-	-	-	-	-	-	593
19	642	Rental of Equipment	3,686	-	-	-	-	-	-	-	-	3,686
20	650	Transportation Expense	56	-	-	-	-	-	-	-	-	56
21	657	Insurance - General Liability	9,876	-	-	-	-	-	-	-	-	9,876
22	659	Insurance - Other	2,073	-	-	-	-	-	-	-	-	2,073
23	660	Advertising Expense	-	-	-	-	-	-	-	-	-	-
24	667	Rate Case Expense	1,355	-	-	-	-	-	-	-	-	1,355
25	670	Bad Debt Expense	3,368	-	-	-	-	-	(2,214)	-	-	1,154
26	675	Miscellaneous Expense	6,644	-	-	-	-	-	-	-	-	6,644
27	403	Depreciation Expense	113,580	-	-	-	-	-	-	-	-	113,580
28	408	Taxes Other Than Income-Utility Regulatory	3,340	-	-	-	-	-	-	-	-	3,340
29	408.11	Taxes Other Than Income-Utility Regulatory	-	-	-	-	-	-	-	17,015	-	17,015
30	408.13	Taxes Other Than Income-Property Taxes	-	-	-	-	-	-	-	-	-	-
31	409	Income Taxes	(5,703)	-	-	-	-	-	-	-	4,503	(1,200)
32		Total Operating Expenses	\$ 341,221	\$ 6,711	\$ -	\$ (10,466)	\$ (7,832)	\$ -	\$ (2,214)	\$ 17,015	\$ 4,503	\$ 348,938
33		Operating Income (Loss)	\$ (4,402)	\$ 36,944	\$ -	\$ 10,466	\$ 7,832	\$ -	\$ 2,214	\$ (17,015)	\$ (4,503)	\$ 31,536

OPERATING INCOME ADJUSTMENT NO. 1 - REVENUE AND EXPENSE ANNUALIZATION

LINE NO.	Description	[A]		[B]		[C]	
		COMPANY AS FILED		STAFF ADJUSTMENTS		STAFF AS ADJUSTED	
1	Metered Water Sales - Actual	\$	365,114	\$	-	\$	365,114
2	Unbilled Revenue		1,321		-		1,321
3	Revenue Annualization to Metered Water Sales		(43,655)		43,655		-
4	Total	\$	322,780	\$	43,655	\$	366,435
5							
6	Purchased Pumping Power - Actual	\$	26,107	\$	-	\$	26,107
7	APS Interim Rate Increase		888		-		888
8	Annualization Adjustment to Pumping Power		(4,429)		4,429		-
9		\$	22,566	\$	4,429	\$	26,995
10							
11	Chemicals - Actual	\$	13,043	\$	-	\$	13,043
12	Annualization Adjustment to Chemicals		(2,282)	\$	2,282		
13		\$	10,761	\$	2,282	\$	13,043
14							
15	Operating Income	\$	289,453	\$	36,944	\$	326,397

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 2 - SALARIES, WAGES, PENSIONS, & BENEFITS

LINE NO.	Description	[A]		[B]		[C]	
		COMPANY AS FILED		STAFF ADJUSTMENTS		STAFF AS ADJUSTED	
1	Salaries and Wage Expense	\$	76,217	\$	(76,217)	\$	-
2	Pension and Benefits		16,164	\$	(16,164)	\$	-
3		\$	92,381	\$	(92,381)	\$	-
4							
5	Contractual Services - Management Fees	\$	-	\$	92,381	\$	92,381

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 3 - MATERIALS AND SUPPLIES, ACCT NO. 620.08

LINE NO.	DESCRIPTION			
		[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Materials and Supplies, Acct No 620.08	16,551	\$ (10,466)	\$ 6,085
2				
3				
4				
5				
6				
7		2006	\$ 1,704	Company Sch E-2
8		2007	\$ -	Company Sch E-2
9		2008	\$ 16,551	Company Sch E-2
10			\$ 18,255	
11		Divided by 3	3	
12			\$ 6,085	

Materials and
Supplies
Acct No. 620.08

References:

Column A: Company Schedule C-1 & E-2
Column B: Testimony, CSB; Data Request CSB 15-1
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 4 - CONTRACTUAL SERVICES, MANAGEMENT FEES

LINE NO.	DESCRIPTION	[A]		[B]		[C]	
		COMPANY AS FILED		STAFF ADJUSTMENTS		STAFF AS ADJUSTED	
1	Contractual Services - Management Fees	\$	-	\$	(7,832)	\$	(7,832)
2							
3							
4	Bonuses (Indirect Allocation)	\$	816	Data Request Response CSB 2-30			
5	Bonuses (Direct Allocation)		2,290	From Trial Balance			
6	Kitchen Supplies		324	From Trial Balance			
7		\$	3,430				
8							
9	Employee Moving & Hiring	\$	52	From Trial Balance			
10	Employee Training & Certification		739	From Trial Balance			
11	Employee Travel		7,874	From Trial Balance			
12	Employee Meals		139	From Trial Balance			
13			8,804				
14	Divided by 2 years		2				
15		\$	4,402				
16							
17	Total (Line 7 + Line 15)	\$	7,832				

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB; Data Request CSB 2-30
Column C: Column [A] + Column [B]

Valencia Water Company - Greater Buckeye Division
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Test Year Ended December 31, 2008

Schedule CSB-11

OPERATING INCOME ADJUSTMENT NO. 5 - CONTRACTUAL SERVICES WATER TESTING EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Water Testing Expense	-	3,774	3,774
2	Contractual Services - Other	3,774	(3,774)	-

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Valencia Water Company - Greater Buckeye Division
Docket No. W-02451A-09-0078
Test Year Ended December 31, 2008

Schedule CSB-12

OPERATING INCOME ADJUSTMENT NO. 6 - BAD DEBT EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Bad Debt Expense	3,368	(2,214)	1,154

References:

Column A: Company Data Request Response CSB 1.26 & RUCO 2.04(e)
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Valencia Water Company - Greater Buckeye Division
Docket No. W-02451A-09-0078
Test Year Ended December 31, 2008

Schedule CSB-13

OPERATING INCOME ADJUSTMENT No. 7 - Property Tax Expense

LINE NO.	Property Tax Calculation	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	\$ 380,474	\$ 380,474
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	760,948	\$ 760,948
4	Staff Recommended Revenue, Per Schedule CSB-1	380,474	\$ 452,732
5	Subtotal (Line 4 + Line 5)	1,141,422	1,213,680
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	380,474	\$ 404,560
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	760,948	\$ 809,120
10	Plus: 10% of CWIP -	12,969	12,969
11	Less: Net Book Value of Licensed Vehicles	-	\$ -
12	Full Cash Value (Line 9 + Line 10 - Line 11)	773,917	\$ 822,089
13	Assessment Ratio	21.0%	21.0%
14	Assessment Value (Line 12 * Line 13)	162,523	\$ 172,639
15	Composite Property Tax Rate	10.4693%	10.4693%
			\$ -
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$ 17,015	
17	Company Proposed Property Tax	-	
18	Staff Test Year Adjustment (Line 16-Line 17)	\$ 17,015	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$ 18,074
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		\$ 17,015
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		\$ 1,059
22	Increase to Property Tax Expense		\$ 1,059
23	Increase in Revenue Requirement		72,258
24	Increase to Property Tax per Dollar Increase in Revenue (Line 19/Line 20)		1.465702%

Valencia Water Company - Greater Buckeye Division
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Test Year Ended December 31, 2008

Schedule CSB-14

OPERATING INCOME ADJUSTMENT NO. 8 - INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Income Tax Expense - Test Year	(5,703)	4,503	(1,200)

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

REVENUE REQUIREMENT

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>[A] COMPANY ORIGINAL COST</u>	<u>[B] STAFF ORIGINAL COST</u>
1	Adjusted Rate Base	\$ 2,598,259	\$ (6,123,255)
2	Adjusted Operating Income (Loss)	\$ (153,369)	\$ 37,666
3	Current Rate of Return (L2 / L1)	-5.90%	Not Meaningful
4a	Required Rate of Return - Per Company	9.94%	Not Applicable
4b	Required Operating Margin Percentage - Per Staff	Not Applicable	10.00%
5a	Required Operating Income (L4a * L1) - Per Company	\$ 258,267	Not Applicable
5b	Required Operating Margin (L4b * L10) - Per Staff	Not Applicable	23,616
6	Operating Income Deficiency (L5 - L2)	\$ 411,636	\$ (14,050)
7	Gross Revenue Conversion Factor	1.64509	1.64724
8	Increase (Decrease) In Gross Revenue (L7 * L6)	\$ 677,177	\$ (23,144)
9	Adjusted Test Year Revenue	\$ 259,304	\$ 259,304
10	Proposed Annual Revenue (L8 + L9)	\$ 936,481	\$ 236,160
11	Required Increase/(Decrease in Revenue) (%) (L8/L9)	261.15%	-8.93%

References:

Column [A]: Company Schedules A-1, C-1, C-3, & D-1

Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-7

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
<u>Calculation of Gross Revenue Conversion Factor:</u>					
1	Revenue	100.0000%			
2	Uncollectible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.2923%			
5	Subtotal (L3 - L4)	60.7077%			
6	Revenue Conversion Factor (L1 / L5)	1.647238			
<u>Calculation of Uncollectible Factor:</u>					
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	38.5989%			
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0.0000%			
<u>Calculation of Effective Tax Rate:</u>					
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.9680%			
14	Federal Taxable Income (L12 - L13)	93.0320%			
15	Applicable Federal Income Tax Rate (Line 53)	34.0000%			
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%			
17	Combined Federal and State Income Tax Rate (L13 + L16)		38.5989%		
<u>Calculation of Effective Property Tax Factor</u>					
18	Unity	100.0000%			
19	Combined Federal and State Income Tax Rate (L17)	38.5989%			
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%			
21	Property Tax Factor (CSB-15, Col B, L24)	1.1293%			
22	Effective Property Tax Factor (L20*L21)		0.6934%		
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.2923%	
24	Required Operating Income (Schedule CSB-1, Line 5)	\$ 23,616			
25	Adjusted Test Year Operating Income (Loss) (Sch CSB-7, Col C, L34)	37,666			
26	Required Increase in Operating Income (L24 - L25)		\$ (14,050)		
27	Income Taxes on Recommended Revenue (Col. [E], L52)	\$ 14,846			
28	Income Taxes on Test Year Revenue (Col. [B], L52)	23,678			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		(8,832)		
30	Recommended Revenue Requirement (Schedule CSB-1, Line 10)	\$ 236,160			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L30*L31)	\$ -			
33	Adjusted Test Year Uncollectible Expense	\$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)		-		
35	Property Tax with Recommended Revenue (CSB-15, Col B, L16)	\$ 8,728			
36	Property Tax on Test Year Revenue (CSB-15, Col A, L19)	8,989			
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		(261)		
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)		\$ (23,144)		
<u>Calculation of Income Tax:</u>					
39	Revenue (Schedule CSB-11, Col. [C], Line 5 & Sch. CSB-1, Col. [D] Line	\$ 259,304	\$ (23,144)	\$ 236,160	
40	Operating Expenses Excluding Income Taxes	\$ 197,959	\$ (261)	\$ 197,698	
41	Synchronized Interest (L56)	\$ -		\$ -	
42	Arizona Taxable Income (L39 - L40 - L41)	\$ 61,345		\$ 38,462	
43	Arizona State Income Tax Rate	6.9680%		6.9680%	
44	Arizona Income Tax (L42 x L43)	\$ 4,274		\$ 2,680	
45	Federal Taxable Income (L42 - L44)	\$ 57,070		\$ 35,782	
46	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
47	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
48	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
49	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
50	Federal Tax on All Income (\$0 - \$10,000,000) @ 34%	\$ 19,404		\$ 12,166	
51	Total Federal Income Tax	\$ 19,404		\$ 12,166	
52	Combined Federal and State Income Tax (L44 + L51)	\$ 23,678		\$ 14,846	
53	Applicable Federal Income Tax Rate [Col. [C], L51 - Col. [A], L51] / [Col. [C], L45 - Col. [A], L45]			34.0000%	
<u>Calculation of Interest Synchronization:</u>					
54	Rate Base (Schedule CSB-3, Col. (C), Line 14	\$ (6,123,255)			
55	Weighted Average Cost of Debt	0.0000%			
56	Synchronized Interest (L45 X L46)	\$ -			

RATE BASE - ORIGINAL COST

LINE NO.	(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	ADJ NO.	(C) STAFF AS ADJUSTED
1	Plant in Service	\$ 4,764,593	\$ -	\$ 4,764,593
2	Less: Accumulated Depreciation	(952,778)	-	(952,778)
3	Net Plant in Service	<u>\$ 3,811,815</u>	<u>\$ -</u>	<u>\$ 3,811,815</u>
<u>LESS:</u>				
4	Advances in Aid of Construction (AIAC)	\$ 1,244,686	\$ -	\$ 1,244,686
5	Service Line and Meter Advances	\$ -	\$ -	\$ -
6	Contributions in Aid of Construction (CIAC)	\$ 73,118	\$ 9,022,750	1 \$ 9,095,868
7	Less: Accumulated Amortization	8,130	301,236	2 309,366
8	Net CIAC	<u>\$ 64,988</u>	<u>8,721,514</u>	<u>\$ 8,786,502</u>
9	Total Advances and Contributions	\$ 1,309,674	\$ 8,721,514	\$ 10,031,188
10	Customer Deposits	\$ 11,537	\$ -	\$ 11,537
11	Accumulated Deferred Income Taxes	\$ -	\$ -	\$ -
<u>ADD:</u>				
12	Deferred Tax Asset	\$ 107,655	\$ -	\$ 107,655
13	Working Capital	\$ -	\$ -	\$ -
14	Total Rate Base	<u>\$ 2,598,259</u>	<u>\$ (8,721,514)</u>	<u>\$ (6,123,255)</u>

References:

Column [A], Company Schedule B-1, Page 1
Column [B]: Schedule CSB-4
Column [C]: Column [A] + Column [B]

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	PLANT IN SERVICE	[A]	[B]	[C]	[D]
			Adj No. 1	ADJ No. 2	
		COMPANY	Accumulated		STAFF AS
	Acct.	AS FILED	Ref: Sch CSB-5	Amort of CIAC	ADJUSTED
	No. Plant Description			Ref: Sch CSB-6	
1					
2	303 Land and Land Rights	\$ 66,651	\$ -	\$ -	\$ 66,651
3	304 Structures and Improvements	46,704	-	-	46,704
4	306 Lake, River, and Other Intakes	-	-	-	-
5	307 Wells and Springs	299,601	-	-	299,601
6	309 Supply Mains	-	-	-	-
7	310 Power Generation Equipment	-	-	-	-
8	311 Pumping Equipment	1,638,498	-	-	1,638,498
9	320 Water Treatment Equipment	1,348,884	-	-	1,348,884
10	330 Distribution Reservoirs and Standpipes	180,350	-	-	180,350
11	331 Transmission and Distribution Mains	880,279	-	-	880,279
12	333 Services	40,356	-	-	40,356
13	334 Meters and Meter Installations	57,148	-	-	57,148
14	335 Hydrants	38,386	-	-	38,386
15	336 Backflow Prevention Devices	5,894	-	-	5,894
16	339 Other Plant and Miscellaneous Equipment	3,543	-	-	3,543
17	340 Office Furniture and Equipment	-	-	-	-
18	341 Transportation Equipment	32,617	-	-	32,617
19	343 Tools, Shop, and Garage Equipment	1,123	-	-	1,123
20	344 Laboratory Equipment	663	-	-	663
21	345 Power Operated Equipment	838	-	-	838
22	346 Communication Equipment	12,408	-	-	12,408
23	347 Miscellaneous Equipment	5,436	-	-	5,436
24	348 Other Tangible Equipment	105,214	-	-	105,214
25	Total Plant in Service - Actual	\$ 4,764,593	\$ -	\$ -	\$ 4,764,593
26	Less: Accumulated Depreciation	\$ (952,778)	\$ -	\$ -	(952,778)
27	Net Plant in Service	\$ 3,811,815	\$ -	\$ -	\$ 3,811,815
28					
29	LESS:				
30	Advances in Aid of Construction (AIAC)	\$ 1,244,686	\$ -	\$ -	\$ 1,244,686
31	Service Line and Meter Advances	\$ -	-	-	\$ -
32					
33	Contributions in Aid of Construction (CIAC)	\$ 73,118	-	-	\$ 73,118
34	CIAC/ICFAS - Plant	-	4,691,475	-	4,691,475
35	CIAC/ICFAS - Other	-	4,331,275	-	4,331,275
36	Total CIAC - Adjusted	\$ 73,118	\$ 9,022,750	\$ -	\$ 9,095,868
37					
38	Less: Accumulated Amortization of CIAC	\$ 8,130	-	-	\$ 8,130
39	Accum Amort of CIAC / ICFAs - Plant	-	-	301,236	301,236
40	Total Accumulated Amortization of CIAC	\$ 8,130	\$ -	\$ 301,236	\$ 309,366
41					
42	Net CIAC	\$ 64,988	9,022,750	(301,236)	\$ 8,786,502
43					
44	Total Advances and Net Contributions	\$ 1,309,674	\$ 9,022,750	\$ (301,236)	\$ 10,031,188
45					
46	Customer Deposits	\$ 11,537	-	-	\$ 11,537
47	Accumulated Deferred Taxes	\$ -	-	-	\$ -
48					
49	ADD:				
50	Deferred Tax Asset	\$ 107,655	-	-	\$ 107,655
51	Working Capital Allowance	\$ -	-	-	\$ -
52	Total Rate Base	\$ 2,598,259	\$ (9,022,750)	\$ 301,236	\$ (6,123,255)

RATE BASE ADJUSTMENT NO. 1 - CONTRIBUTION IN AID OF CONSTRUCTION, ICFAS

		[A]	[B]	[C]	
LINE NO.	DESCRIPTION	COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED	
1	CIAC/ICFAS - Plant	\$ -	4,691,475	\$ 4,691,475	See calculation below
2	CIAC/ICFAS - Other		4,331,275	4,331,275	
3	Total CIAC/ICFAS	\$ -	\$ 9,022,750	\$ 9,022,750	

	Calculation of
	CIAC/ICFAS - Plant
Test Year Plant	\$ 4,764,593
Less: Test Year CIAC	\$ (73,118)
CIAC/ICFAS - Plant	\$ 4,691,475

References:

Column [A]: Company Schedule B-2
Column [B]: Testimony, CSB
Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 2 - ACCUMULATED AMORTIZATION OF CIAC/ ICFA

LINE NO.	DESCRIPTION	[A] [B] [C]		
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Accumulated Amortization of CIAC/ICFA	\$ -	\$ 301,236	\$ 301,236
2				
3				
4				
5				
6	2006 Beginning CIAC/ICFA Balance	\$ -		
7	CIAC/ICFA Amort Rate		4.82% From Line 43, Col I	
8	2006 Amort on Beginning Balance		-	
9				
10	2006 CIAC/ICFA Addition	\$ 1,310,252	Line 43, Col E - \$73,118 (TY CIAC)	
11	CIAC/ICFA Amort Rate (Half Year Convention)		2.41% From Line 43, Col I divided by 2	
12	2006 Amort on CIAC/ICFA Addition		31,577	
13				
14	2006 Ending Accu Amort of CIAC Balance (L8+ L12)	\$ 31,577		
15				
16	2007 Beginning CIAC/ICFA Balance	\$ 1,310,252	Line 6 + Line 10	
17	CIAC/ICFA Amort Rate		2.99% From Line 44, Col I	
18	2007 Amort on Beginning Balance		39,177	
19				
20	2007 CIAC/ICFA Addition	\$ 2,718,545	Col E Line 44 - Col E Line 43	
21	CIAC/ICFA Amort Rate (Half Year Convention)		1.49% From Line 44, Col I divided by 2	
22	2007 Amort on CIAC/ICFA Addition		40,506	
23				
24	2007 Ending Accu Amort of CIAC Balance (L14+L18+L22)	\$ 111,260		
25				
26	2008 Beginning CIAC/ICFA Balance	\$ 4,028,797	Line 16 + Line 20	
27	CIAC/ICFA Amort Rate		4.36% From Line 45	
28	2008 Amort on Beginning Balance		175,656	
29				
30	2008 CIAC/ICFA Addition		662,678 Col E Line 45 - Col E Line 44	
31	CIAC/ICFA Amort Rate (Half Year Convention)		2.18% From Line 45, Col I divided by 2	
32	2008 Amort on CIAC/ICFA Addition		14,446	
33				
34	2008 Ending Accu Amort of CIAC Balance	\$ 301,362	Line 24+ Line 28 + Line 32	
35	To Reconcile to Sch CSB-4, Line 39 and Sch CSB-14, Line 30	\$ (126)		
36	2008 Ending Accu Amort of CIAC Balance	\$ 301,236		

[D] [E] [F] [G] [H] [I]					
Calculation of CIAC/ICFA Amortization Rate					
Year	Tonopah Gross Plant ¹	Tonopah Land & Land Rights ¹	Depreciable Plant ¹ Col E - Col F	Tonopah Depreciation Expense ¹	CIAC Amortization Rate Col H / Col G
2006	\$1,383,370	\$ 66,651	\$ 1,316,719	\$ 63,404	4.82%
2007	\$4,101,915	\$ 66,651	\$ 4,035,264	\$ 120,514	2.99%
2008	\$4,764,593	\$ 66,651	\$ 4,697,942	\$ 204,599	4.36%

¹ From Company provided Plant Additions, Retirements, and Accum Depreciation Schedule

OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	[C] STAFF TEST YEAR ADJ. AS NO. ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
REVENUES:						
1	Metered Water Sales	\$ 250,201	\$ -	\$ 250,201	\$ (23,144)	\$ 227,057
2	Water Sales - Unmetered	-	-	-	-	-
3	Other Operating Revenues	9,103	-	9,103	-	9,103
4	Total Revenues	\$ 259,304	\$ -	\$ 259,304	\$ (23,144)	\$ 236,160
EXPENSES:						
7	Salaries and Wages - Employees	\$ 48,385	\$ (48,385)	1 \$ -	\$ -	\$ -
8	Employee Pensions and Benefits	10,309	(10,309)	1 -	-	-
9	Purchased Water	-	-	-	-	-
10	Purchased Power	16,192	(1,275)	4 14,917	-	14,917
11	Fuel for Power Production	-	-	-	-	-
12	Chemicals	31,128	-	31,128	-	31,128
13	Materials and Supplies - Acct. No. 620	12,609	-	12,609	-	12,609
14	Materials and Supplies - Acct. No. 620.08	10,278	(6,059)	2 4,219	-	4,219
15	Contractual Services - Management Fees	-	53,625	1,3 53,625	-	53,625
16	Contractual Services - Testing	11,006	-	11,006	-	11,006
17	Contractual Services - Other	34,683	-	34,683	-	34,683
18	Rental of Building/Real Property	2,075	-	2,075	-	2,075
19	Rental of Equipment	732	-	732	-	732
20	Transportation Expense	6,965	-	6,965	-	6,965
21	Insurance - General Liability	1,167	-	1,167	-	1,167
22	Insurance - Other	216	-	216	-	216
23	Advertising Expense	-	-	-	-	-
24	Rate Case Expense	1,333	-	1,333	-	1,333
25	Bad Debt Expense	2,593	(1,729)	5 864	-	864
26	Miscellaneous Expense	4,474	-	4,474	-	4,474
27	Depreciation Expense	307,538	(307,538)	6 0	-	0
28	Taxes Other Than Income-Utility Regulatory	8,614	-	8,614	-	8,614
29	Taxes Other Than Income-Property Taxes	-	8,989	7 8,989	(261)	8,728
30	Taxes Other Than Income-Other	344	-	344	-	344
31	Income Taxes	(97,968)	121,646	8 23,678	(8,832)	14,846
32	Total Operating Expenses	\$ 412,673	\$ (191,035)	\$ 221,638	\$ (9,094)	\$ 212,544
33						
34	Operating Income (Loss)	\$ (153,369)	\$ 191,035	\$ 37,666	\$ (14,050)	\$ 23,616

References:

Column (A): Company Schedule C-1, Page 2
Column (B): Schedule CSB-8
Column (C): Column (A) + Column (B)
Column (D): Schedules CSB-1 and CSB-2
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	ACCT NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 Salaries, Wages Pensions, & Benefits Ref. Sch CSB-9	[C] ADJ #2 Materials & Supplies Acct No. 620.08 Ref. Sch CSB-10	[D] ADJ #3 Contract Svcs Management Fees Ref. Sch CSB-11	[E] ADJ #4 Purchased Power Ref. Sch CSB-12	[F] ADJ #5 Bad Debt Expense Ref. Sch CSB-13	[G] ADJ #6 Depreciation Expense Ref. Sch CSB-14	[H] ADJ #7 Property Taxes Ref. Sch CSB-15	[I] ADJ #8 Income Taxes Ref. Sch CSB-16	[J] STAFF ADJUSTED
1		REVENUES:										
2		Metered Water Sales	\$ 250,201	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,201
3		Water Sales - Unmetered	-	-	-	-	-	-	-	-	-	-
4		Other Operating Revenues	-	-	-	-	-	-	-	-	-	-
5		Total Revenues	\$ 259,304	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 259,304
6		OPERATING EXPENSES:										
7	601	Salaries and Wages - Employees	\$ 48,385	(48,385)	-	-	-	-	-	-	-	-
8	604	Employee Pensions and Benefits	10,309	(10,309)	-	-	-	-	-	-	-	-
9	610	Purchased Water	-	-	-	-	(1,275)	-	-	-	-	-
10	615	Purchased Power	16,192	-	-	-	-	-	-	-	-	-
11	616	Fuel for Power Production	-	-	-	-	-	-	-	-	-	-
12	618	Chemicals	31,128	-	-	-	-	-	-	-	-	-
13	620	Materials and Supplies	12,609	-	-	-	-	-	-	-	-	-
14	620.08	Materials and Supplies	10,278	-	(6,059)	-	-	-	-	-	-	-
15	634	Contractual Services - Management Fees	-	58,694	-	(5,070)	-	-	-	-	-	-
16	635	Contractual Services - Testing	11,006	-	-	-	-	-	-	-	-	-
17	636	Contractual Services - Other	34,683	-	-	-	-	-	-	-	-	-
18	641	Rental of Building/Real Property	2,075	-	-	-	-	-	-	-	-	-
19	642	Rental of Equipment	732	-	-	-	-	-	-	-	-	-
20	650	Transportation Expense	6,965	-	-	-	-	-	-	-	-	-
21	657	Insurance - General Liability	1,167	-	-	-	-	-	-	-	-	-
22	659	Insurance - Other	216	-	-	-	-	-	-	-	-	-
23	660	Advertising Expense	-	-	-	-	-	-	-	-	-	-
24	667	Rate Case Expense	1,333	-	-	-	-	-	-	-	-	-
25	670	Bad Debt Expense	2,593	-	-	-	(1,729)	-	-	-	-	-
26	675	Miscellaneous Expense	4,474	-	-	-	-	-	-	-	-	-
27	403	Depreciation Expense	307,538	-	-	-	-	-	(307,538)	-	-	-
28	408	Taxes Other Than Income-Utility Regulatory	8,614	-	-	-	-	-	-	-	-	-
29	408.11	Taxes Other Than Income-Property Taxes	-	-	-	-	-	-	-	-	-	-
30	408.13	Taxes Other Than Income-Other	-	-	-	-	-	-	-	8,989	-	-
31	409	Income Taxes	344	-	-	-	-	-	-	-	-	-
32		Total Operating Expenses	\$ 412,673	\$ -	\$ (6,059)	\$ (5,070)	\$ (1,275)	\$ (1,729)	\$ (307,538)	\$ 8,989	\$ 121,646	\$ 221,638
33		Operating Income (Loss)	\$ (153,369)	\$ -	\$ 6,059	\$ 5,070	\$ 1,275	\$ 1,729	\$ 307,538	\$ (8,989)	\$ (121,646)	\$ 37,666

OPERATING INCOME ADJUSTMENT NO. 1 - SALARIES, WAGES, PENSIONS, & BENEFITS

LINE NO.	Description	[A]		[B]		[C]	
		COMPANY AS FILED		STAFF ADJUSTMENTS		STAFF AS ADJUSTED	
1	Salaries and Wage Expense	\$	48,385	\$	(48,385)	\$	-
2	Pension and Benefits		10,309	\$	(10,309)	\$	-
3		\$	58,694	\$	(58,694)	\$	-
4							
5	Contractual Services - Management Fees	\$	-	\$	58,694	\$	58,694

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 2 - MATERIALS AND SUPPLIES, ACCT NO. 620.08

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Materials and Supplies, Acct No 620.08	10,278	\$ (6,059)	\$ 4,219

Materials and Supplies Acct No. 620.08		
2006	\$ 2,379	Company Sch E-2
2007	\$ -	Company Sch E-2
2008	\$ 10,278	Company Sch E-2
	\$ 12,657	
Divided by 3	3	
	\$ 4,219	

References:

Column A: Company Schedule C-1 & E-2
Column B: Testimony, CSB; Data Request CSB 15-1
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 3 - CONTACTUAL SERVICES, MANAGEMENT FEES

LINE NO.	DESCRIPTION	[A]		[B]		[C]	
		COMPANY AS FILED		STAFF ADJUSTMENTS		STAFF AS ADJUSTED	
1	Contractual Services - Management Fees	\$	-	\$	(5,070)	\$	(5,070)
2							
3							
4	Bonuses (Indirect Allocation)	\$	441	Data Request Response CSB 2-33			
5	Bonuses (Direct Allocation)		1,312	From Trial Balance			
6	Kitchen Supplies		223	From Trial Balance			
7		\$	1,976				
8							
9							
10	Employee Moving & Hiring	\$	32	From Trial Balance			
11	Employee Training & Certification		517	From Trial Balance			
12	Employee Travel		5,539	From Trial Balance			
13	Employee Meals		99	From Trial Balance			
14			6,187				
15	Divided by 2 years		2				
16		\$	3,094				
17							
18	Total (Line 7 + Line 16)	\$	5,070				

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 4 - PURCHASED POWER

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Purchased Power	16,192	\$ (1,275)	\$ 14,917

From Staff Engineering Report	
Water System	Water loss (%)
Garden City, PWS #07-037	23.4%
Roseview, PWS #07-082	8.3%
WPE #1, PWS #N/A	31.5%
WPE #6, PWS #07-733	23.4%
Tufte, PWS #07-617	13.6%
Buckeye Ranch, PWS #07-618	10.1%
Dixie, PWS #07-030	28.9%
Sunshine, PWS #07-071	3.8%
	143.0%
Divided by 8 Water Systems	8
Average Water Loss	17.9%
Average Water Loss	17.9%
Less: Water Loss Allowed by Staff Engineering	10.0%
Water Loss Percentage Exceeding Maximum Allowed	7.9%
Water Loss Percentage Exceeding Maximum Allowed	7.9%
Multiplied by Purchased Pumping Power Expense	16,192
Amount Disallowed	\$ 1,275

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 5 - BAD DEBT EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Bad Debt Expense	2,593	(1,729)	864

References:

Column A: Company Data Request Response CSB 1.26 & RUCO 2.04(e)
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 6 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

LINE NO.	DESCRIPTION	[A] PLANT In SERVICE Per Staff	[B] NonDepreciable or Fully Depreciated PLANT	[C] DEPRECIABLE PLANT (Col A - Col B)	[D] DEPRECIATION RATE	[E] DEPRECIATION EXPENSE (Col C x Col D)
1	303 Land and Land Rights	\$ 66,651	\$ (66,651)	\$ 133,302	0.00%	\$ -
2	304 Structures and Improvements	46,704	-	46,704	3.33%	1,555
3	306 Lake, River, and Other Intakes	-	-	-	2.50%	-
4	307 Wells and Springs	299,601	-	299,601	3.33%	9,977
5	309 Supply Mains	-	-	-	2.00%	-
6	310 Power Generation Equipment	-	-	-	5.00%	-
7	311 Pumping Equipment	1,638,498	-	1,638,498	12.50%	204,812
8	320 Water Treatment Equipment	1,348,884	-	1,348,884	3.33%	44,918
9	330 Distribution Reservoirs and Standpipes	180,350	-	180,350	2.22%	4,004
10	331 Transmission and Distribution Mains	880,279	-	880,279	2.00%	17,606
11	333 Services	40,356	-	40,356	3.33%	1,344
12	334 Meters and Meter Installations	57,148	-	57,148	8.33%	4,760
13	335 Hydrants	38,386	-	38,386	2.00%	768
14	336 Backflow Prevention Devices	5,894	-	5,894	6.67%	393
15	339 Other Plant and Miscellaneous Equipment	3,543	-	3,543	6.67%	236
16	340 Office Furniture and Equipment	-	-	-	6.67%	-
17	341 Transportation Equipment	32,617	-	32,617	20.00%	6,523
18	343 Tools, Shop, and Garage Equipment	1,123	-	1,123	5.00%	56
19	344 Laboratory Equipment	663	-	663	10.00%	66
20	345 Power Operated Equipment	838	-	838	5.00%	42
21	346 Communication Equipment	12,408	-	12,408	10.00%	1,241
22	347 Miscellaneous Equipment	5,436	-	5,436	10.00%	544
23	348 Other Tangible Equipment	105,214	-	105,214	10.00%	10,521
24	Total Plant	\$ 4,764,593	\$ -	\$ 4,831,244		\$ 309,366
25						
29						
30	Depreciation Expense Before Amortization of CIAC:	\$ 309,366				
31	Less Amortization of CIAC:	\$ 309,366				
32	Test Year Depreciation Expense - Staff:	\$ 0				
33	Depreciation Expense - Company:	\$ 307,538				
34	Staff's Total Adjustment:	\$ (307,538)				

References:

Column [A]: Schedule CSB-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

Water Utility of Greater Tonopah
Docket No. W-02450A-09-0081
Test Year Ended December 31, 2008

Schedule CSB-15

OPERATING INCOME ADJUSTMENT NO. 7 - PROPERTY TAX EXPENSE

LINE NO.	Property Tax Calculation	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	\$ 259,304	\$ 259,304
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	518,608	\$ 518,608
4	Staff Recommended Revenue, Per Schedule CSB-1	259,304	\$ 236,160
5	Subtotal (Line 4 + Line 5)	777,912	754,768
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	259,304	\$ 251,589
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	518,608	\$ 503,179
10	Plus: 10% of CWIP -	42,191	42,191
11	Less: Net Book Value of Licensed Vehicles	30,171	\$ 30,171
12	Full Cash Value (Line 9 + Line 10 - Line 11)	530,628	\$ 515,199
13	Assessment Ratio	21.0%	21.0%
14	Assessment Value (Line 12 * Line 13)	111,432	\$ 108,192
15	Composite Property Tax Rate	8.0667%	8.0667%
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$ 8,989	\$ -
17	Company Proposed Property Tax	-	
18	Staff Test Year Adjustment (Line 16-Line 17)	\$ 8,989	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$ 8,728
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		\$ 8,989
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		\$ (261)
22	Increase to Property Tax Expense		\$ (261)
23	Increase in Revenue Requirement		(23,144)
24	Increase to Property Tax per Dollar Increase in Revenue (Line19/Line 20)		1.129338%

Water Utility of Greater Tonopah
Docket No. W-02450A-09-0081
Test Year Ended December 31, 2008

Schedule CSB-16

OPERATING INCOME ADJUSTMENT NO. 8 - INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]
		COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Income Tax Expense - Test Year	(97,968)	121,646	23,678

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	Town Division	Buckeye	Tonopah	Consolidated
1	Adjusted Rate Base	\$ 4,240,018	\$ 929,057	\$ (6,123,255)	\$ (954,180)
2	Adjusted Operating Income (Loss)	\$ (501,654)	\$ 31,536	\$ 37,666	\$ (481,366)
3	Current Rate of Return (L2 / L1)	-11.83%	3.39%	Not Meaningful	Not Meaningful
4a	Required Rate of Return	8.70%	8.10%	Not Applicable	Not Applicable
4b	Required Operating Margin Percentage - Per Staff	Not Applicable	Not Applicable	10.00%	10.00%
5a	Required Operating Income (L4a * L1)	\$ 368,882	\$ 75,254	Not Applicable	Not Applicable
5b	Required Operating Margin (L4b * L10) - Per Staff	Not Applicable	Not Applicable	\$ 23,616	\$ 535,856
6	Operating Income Deficiency (L5 - L2)	\$ 870,536	\$ 43,717	\$ (14,050)	\$ 1,017,222
7	Gross Revenue Conversion Factor	1.65332	1.65286	1.64724	1.65286
8	Increase (Decrease) In Gross Revenue (L7 * L6)	\$ 1,439,278	\$ 72,258	\$ (23,144)	\$ 1,681,323
9	Adjusted Test Year Revenue	\$ 3,037,462	\$ 380,474	\$ 259,304	\$ 3,677,240
10	Proposed Annual Revenue (L8 + L9)	\$ 4,476,740	\$ 452,732	\$ 236,160	\$ 5,358,563
11	Required Increase/Decrease in Revenue (%) (L8/L9)	47.38%	18.99%	-8.93%	45.72%
12	Number of Customers	5,024	620	346	5,990

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
<u>Calculation of Gross Revenue Conversion Factor:</u>					
1	Revenue	100.0000%			
2	Uncollectible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	39.4987%			
5	Subtotal (L3 - L4)	60.5013%			
6	Revenue Conversion Factor (L1 / L5)	1.652857			
<u>Calculation of Uncollectible Factor:</u>					
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	38.5989%			
9	One Minus Combined Income Tax Rate (L7 - L8)	61.4011%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0.0000%			
<u>Calculation of Effective Tax Rate:</u>					
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.9680%			
14	Federal Taxable Income (L12 - L13)	93.0320%			
15	Applicable Federal Income Tax Rate (Line 53)	34.0000%			
16	Effective Federal Income Tax Rate (L14 x L15)	31.6309%			
17	Combined Federal and State Income Tax Rate (L13 + L16)		38.5989%		
<u>Calculation of Effective Property Tax Factor</u>					
18	Unity	100.0000%			
19	Combined Federal and State Income Tax Rate (L17)	38.5989%			
20	One Minus Combined Income Tax Rate (L18-L19)	61.4011%			
21	Property Tax Factor (Schedule CSB-5)	1.4655%			
22	Effective Property Tax Factor (L20*L21)		0.8998%		
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)			39.4987%	
24	Required Operating Income (Schedule CSB-1, Line 5)	\$ 535,856			
25	Adjusted Test Year Operating Income (Loss) (Schedule CSB-4)	(481,366)			
26	Required Increase in Operating Income (L24 - L25)		\$ 1,017,222		
27	Income Taxes on Recommended Revenue (Col. [C], L52)	\$ 336,858			
28	Income Taxes on Test Year Revenue (Col. [B], L52)	(302,604)			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		639,461		
30	Recommended Revenue Requirement (Schedule CSB-1, Line 10)	\$ 5,358,563			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncollectible Expense on Recommended Revenue (L30*L31)	\$ -			
33	Adjusted Test Year Uncollectible Expense	\$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)				
35	Property Tax with Recommended Revenue (CSB-5)	\$ 193,879			
36	Property Tax on Test Year Revenue (CSB-5)	169,240			
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		24,639		
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)		\$ 1,681,323		
<u>Calculation of Income Tax:</u>					
39	Revenue (Schedule CSB-11, Col. [C], Line 5 & Sch. CSB-1, Col. [D] Line 1C)	\$ 3,677,240	\$ 1,681,323	\$ 5,358,563	
40	Operating Expenses Excluding Income Taxes	\$ 4,461,210	\$ 24,639	\$ 4,485,849	
41	Synchronized Interest (L56)	\$ -		\$ -	
42	Arizona Taxable Income (L39 - L40 - L41)	\$ (783,970)		\$ 872,714	
43	Arizona State Income Tax Rate	6.9680%		6.9680%	
44	Arizona Income Tax (L42 x L43)	\$ (54,627)		\$ 60,811	
45	Federal Taxable Income (L42 - L44)	\$ (729,343)		\$ 811,903	
46	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
47	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
48	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
49	Federal Tax on Income Bracket - Not Used	\$ -		\$ -	
50	Federal Tax on All Income (\$0 - \$10,000,000) @ 34%	\$ (247,977)		\$ 276,047	
51	Total Federal Income Tax	\$ (247,977)		\$ 276,047	
52	Combined Federal and State Income Tax (L44 + L51)	\$ (302,604)		\$ 336,858	
53	Applicable Federal Income Tax Rate [Col. [C], L51 - Col. [A], L51] / [Col. [C], L45 - Col. [A], L45]			34.0000%	
<u>Calculation of Interest Synchronization:</u>					
54	Rate Base (Schedule CSB-3, Col. (C), Line 14)	\$ (6,123,255)			
55	Weighted Average Cost of Debt	0.0000%			
56	Synchronized Interest (L45 X L46)	\$ -			

Consolidated Systems (Town Division, Buckeye, Tonopah)
Docket Nos. W-01212A-09-0082, Et. Al
Test Year Ended December 31, 2008

Schedule CSB-3

RATE BASE

LINE NO.	Acct. No. Plant Description	Town Division	Buckeye	Tonopah	Total
1	303 Land and Land Rights	\$ 148,446	\$ 27,898	\$ 66,651	\$ 242,995
2	304 Structures and Improvements	945,383	39,169	46,704	1,031,256
3	306 Lake, River, and Other Intakes	-	-	-	-
4	307 Wells and Springs	775,544	115,895	299,601	1,191,040
5	309 Supply Mains	-	-	-	-
6	310 Power Generation Equipment	20,612	-	-	20,612
7	311 Pumping Equipment	7,803,214	472,851	1,638,498	9,914,563
8	320 Water Treatment Equipment	3,892,532	729,148	1,348,884	5,970,564
9	330 Distribution Reservoirs and Standpipes	3,439,680	588,545	180,350	4,208,575
10	331 Transmission and Distribution Mains	19,407,008	712,346	880,279	20,999,633
11	333 Services	2,795,075	37,406	40,356	2,872,837
12	334 Meters and Meter Installations	1,562,332	35,389	57,148	1,654,869
13	335 Hydrants	1,900,270	40,757	38,386	1,979,413
14	336 Backflow Prevention Devices	12,674	5,432	5,894	24,000
15	339 Other Plant and Miscellaneous Equipment	114,439	4,284	3,543	122,266
16	340 Office Furniture and Equipment	46,206	-	-	46,206
17	341 Transportation Equipment	275,038	-	32,617	307,655
18	343 Tools, Shop, and Garage Equipment	90,582	1,650	1,123	93,355
19	344 Laboratory Equipment	42,171	-	663	42,834
20	345 Power Operated Equipment	55,588	-	838	56,426
21	346 Communication Equipment	20,584	4,225	12,408	37,217
22	347 Miscellaneous Equipment	15,371	10,089	5,436	30,896
23	348 Other Tangible Equipment	2,514,672	7,453	105,214	2,627,339
24	Total Plant in Service - Actual	\$ 45,877,421	\$ 2,832,537	\$ 4,764,593	\$ 53,474,551
25	Less: Accumulated Depreciation	\$ (3,071,499)	\$ (898,484)	\$ (952,778)	\$ (4,922,761)
26	Net Plant in Service	\$ 42,805,922	\$ 1,934,053	\$ 3,811,815	\$ 48,551,790
28	<u>LESS:</u>				
29	Advances in Aid of Construction (AIAC)	\$ 37,992,781	\$ 747,555	\$ 1,244,686	\$ 39,985,022
30	Service Line and Meter Advances	-	-	-	-
32	Contributions in Aid of Construction (CIAC)	\$ 890,221	\$ 407,979	\$ 73,118	\$ 1,371,318
33	CIAC/ICFAS - Plant	-	-	4,691,475	4,691,475
34	CIAC/ICFAS - Other	-	-	4,331,275	4,331,275
35	Total CIAC - Adjusted	\$ 890,221	\$ 407,979	\$ 9,095,868	\$ 10,394,068
37	Less: Accumulated Amortization of CIAC	\$ -	-	8,130	8,130
38	Accum Amort of CIAC / ICFAs - Plant	-	-	301,236	301,236
39	Total Accumulated Amortization of CIAC	\$ -	\$ -	\$ 309,366	\$ 309,366
41	Net CIAC	890,221	407,979	8,786,502	10,084,702
43	Total Advances and Net Contributions	\$ 38,883,002	\$ 1,155,534	\$ 10,031,188	\$ 50,069,724
45	Customer Deposits	162,132	11,080	11,537	184,749
46	Deferred Tax Liability	-	-	-	-
48	<u>ADD:</u>				
49	Deferred Tax Asset	380,947	90,222	107,655	578,824
50	Working Capital Allowance	-	-	-	-
51	Total Rate Base	\$ 4,141,735	\$ 857,661	\$ (6,123,255)	\$ (1,123,859)

LINE NO.	DESCRIPTION	[A] Town Division Staff		[B] Buckeye Staff		[C] Tonopah Staff		[D]		[E] TOTAL STAFF		[F] STAFF		[G]	
		Test Year As Adjusted		Test Year As Adjusted		Test Year As Adjusted		Consolidation Adjustments	Adj No.	TEST YEAR AS ADJUSTED		PROPOSED CHANGES	Adj No.	STAFF RECOMMENDED	
<u>REVENUES:</u>															
1	Metered Water Sales	\$ 2,802,979	\$	366,435	\$	250,201			\$	3,419,615	\$	1,681,323	\$	5,109,938	
2	Water Sales - Unmetered	-		-		-				-		-		-	
3	Other Operating Revenues	234,483		14,039		9,103				257,625		-		257,625	
4	Total Revenues	\$ 3,037,462	\$	380,474	\$	259,304	\$		\$	3,677,240	\$	1,681,323	\$	5,358,566	
5															
<u>EXPENSES:</u>															
6	Salaries and Wages - Employees	\$ -	\$	-	\$	-			\$	-	\$	-		-	
7	Employee Pensions and Benefits	-		-		-				-		-		-	
8	Purchased Water	-		52,085		-				52,085		-		52,085	
9	Purchased Power	307,969		26,994		14,917				349,880		-		349,880	
10	Fuel for Power Production	-		-		-				-		-		-	
11	Chemicals	152,137		13,043		31,128				196,308		-		196,308	
12	Materials and Supplies - Acct No. 620	31,821		4,236		12,609				48,666		-		48,666	
13	Materials and Supplies - Acct No. 620.08	59,011		6,085		4,219				69,315		-		69,315	
14	Contractual Services - Management Fees	752,255		84,549		53,625				890,429		-		890,429	
15	Contractual Services - Testing	33,729		3,774		11,006				48,509		-		48,509	
16	Contractual Services - Other	41,898		-		34,683				76,581		-		76,581	
17	Rental of Building/Real Property	37,473		593		2,075				40,141		-		40,141	
18	Rental of Equipment	4,239		3,886		732				8,657		-		8,657	
19	Transportation Expense	67,812		56		6,965				74,833		-		74,833	
20	Insurance - General Liability	17,098		9,876		1,167				28,141		-		28,141	
21	Insurance - Other	3,336		2,073		216				5,625		-		5,625	
22	Advertising Expense	-		-		-				-		-		-	
23	Rate Case Expense	18,667		1,355		1,333				21,355		-		21,355	
24	Bad Debt Expense	6,417		1,154		864				8,435		-		8,435	
25	Miscellaneous Expense	28,042		6,644		4,474				39,160		-		39,160	
26	Depreciation Expense	2,199,986		113,580		0				2,313,566		-		2,313,566	
27	Taxes Other Than Income-Utility Regulatory	5,885		3,340		8,614				17,839		-		17,839	
28	Taxes Other Than Income-Property Taxes	143,236		17,015		8,989				169,240		-		169,240	
29	Taxes Other Than Income-Other	2,101		-		344				2,445		-		2,445	
30	Income Taxes	(373,996)		(1,200)		23,678				(302,604)		-		(302,604)	
31	Total Operating Expenses	\$ 3,539,116	\$	348,938	\$	221,638	\$	48,915	\$	4,188,606	\$	664,101	\$	4,822,707	
32															
33	Operating Income (Loss)	\$ (501,654)	\$	31,536	\$	37,666	\$		\$	(481,366)	\$	1,017,222	\$	535,855	
34															

Town Division	\$	36,005
Buckeye	\$	12,909
	\$	48,914

Adj. No. 2 Schedule CSB-5, Line 39
Adj. No. 3 Schedule CSB-2, Line 52

LINE NO.	Property Tax Calculation	Town Division	Buckeye	Tonopah	Total
1	Staff Adjusted Test Year Revenues	\$ 3,037,462	\$ 380,474	\$ 259,304	\$ 3,677,240
2	Weight Factor	2	2	2	2
3	Subtotal (Line 1 * Line 2)	6,074,924	760,948	518,608	7,354,480
4	Staff Recommended Revenue (Test Year), Per Schedule CSB-1	3,037,462	380,474	259,304	3,677,240
5	Subtotal (Line 4 + Line 5)	9,112,386	1,141,422	777,912	11,031,720
6	Number of Years	3	3	3	3
7	Three Year Average (Line 5 / Line 6)	3,037,462	380,474	259,304	3,677,240
8	Department of Revenue Mutilplier	2	2	2	2
9	Revenue Base Value (Line 7 * Line 8)	6,074,924	760,948	518,608	7,354,480
10	Plus: 10% of CWIP -	415,844	12,969	42,191	471,004
11	Less: Net Book Value of Licensed Vehicles	96,323	-	30,171	126,494
12	Full Cash Value (Line 9 + Line 10 - Line 11)	6,394,445	773,917	530,628	7,698,990
13	Assessment Ratio	21.0%	21.0%	21.0%	21.0%
14	Assessment Value (Line 12 * Line 13)	1,342,833	162,523	111,432	1,616,788
15	Composite Property Tax Rate	10.6667%	10.4693%	8.0667%	10.4677%
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$ 143,236	\$ 17,015	\$ 8,989	\$ 169,240
17	Company Proposed Property Tax	\$ -	\$ -	\$ -	\$ -
18	Staff Test Year Adjustment (Line 16-Line 17)	\$ 143,236	\$ 17,015	\$ 8,989	\$ 169,240

	Town Division	Buckeye	Tonopah	Total
19 Staff Adjusted Test Year Revenues	\$ 3,037,462	\$ 380,474	\$ 259,304	\$ 3,677,240
20 Weight Factor	2	2	2	2
21 Subtotal (Line 19 * Line 20)	6,074,924	760,948	518,608	7,354,480
22 Staff Recommended Revenue, Per Schedule CSB-1	\$ 4,476,740	\$ 452,732	\$ 236,160	\$ 5,358,563
23 Subtotal (Line 21 + Line 22)	10,551,664	1,213,680	754,768	12,713,043
24 Number of Years	3	3	3	3
25 Three Year Average (Line 23 / Line 24)	3,517,221	404,560	251,589	4,237,681
26 Department of Revenue Mutilplier	2	2	2	2
27 Revenue Base Value (Line 25 * Line 26)	7,034,443	809,120	503,179	8,475,362
28 Plus: 10% of CWIP -	415,844	12,969	42,191	471,004
29 Less: Net Book Value of Licensed Vehicles	96,323	-	30,171	126,494
30 Full Cash Value (Line 27 + Line 28 - Line 29)	7,353,963	822,089	515,199	8,819,872
31 Assessment Ratio	21.0%	21.0%	21.0%	21.0%
32 Assessment Value (Line 30 * Line 31)	1,544,332	172,639	108,192	1,852,173
33 Composite Property Tax Rate	10.6667%	10.4693%	8.0667%	10.4677%
34				
35				
36 Property Tax - Staff Recommended Rev (Line 34)	\$ 164,729	\$ 18,074	\$ 8,728	\$ 193,879
37 Staff Test Year Adjusted Property Tax Expense (Line 18)	\$ 143,236	\$ 17,015	\$ 8,989	\$ 169,240
38 Increase in Prop Tax Exp Due to Incr in Rev Requ (Line 36 - Line 37)	\$ 21,493	\$ 1,059	\$ (261)	\$ 24,639
39 Increase to Property Tax Expense (Line 38)	\$ 21,493	\$ 1,059	\$ (261)	\$ 24,639
40 Increase in Revenue Requirement (Line 22 - Line 19)	1,439,278	72,258	(23,144)	1,681,323
41 Increase to Property Tax per Dollar Increase in Rev (Line39/Line 40)	1.493338%	1.465702%	1.129338%	1.465472%

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES

Chairman

GARY PIERCE

Commissioner

PAUL NEWMAN

Commissioner

SANDRA D. KENNEDY

Commissioner

BOB STUMP

Commissioner

IN THE MATTER OF THE APPLICATION OF)
GLOBAL WATER-PALO VERDE UTILITIES)
COMPANY FOR THE ESTABLISHMENT OF)
JUST AND REASONABLE RATES AND)
CHARGES FOR UTILITY SERVICE DESIGNED)
TO REALIZE A REASONABLE RATE OF)
RETURN ON THE FAIR VALUE OF ITS)
PROPERTY THROUGHOUT THE STATE OF)
ARIZONA)

DOCKET NO. SW-20445A-09-0077

IN THE MATTER OF THE APPLICATION OF)
VALENCIA WATER COMPANY-GREATER)
BUCKEYE DIVISION FOR THE)
ESTABLISHMENT OF JUST AND)
REASONABLE RATES AND CHARGES FOR)
UTILITY SERVICE DESIGNED TO REALIZE)
A REASONABLE RATE OF RETURN ON)
THE FAIR VALUE OF ITS PROPERTY)
THROUGHOUT THE STATE OF ARIZONA)

DOCKET NO. W-02451A-09-0078

IN THE MATTER OF THE APPLICATION OF)
WILLOW VALLEY WATER COMPANY FOR)
THE ESTABLISHMENT OF JUST AND)
REASONABLE RATES AND CHARGES FOR)
UTILITY SERVICE DESIGNED TO REALIZE A)
REASONABLE RATE OF RETURN ON THE)
FAIR VALUE OF ITS PROPERTY)
THROUGHOUT THE STATE OF ARIZONA)

DOCKET NO. W-01732A-09-0079

IN THE MATTER OF THE APPLICATION OF)
GLOBAL WATER-SANTA CRUZ WATER)
COMPANY FOR THE ESTABLISHMENT OF)
JUST AND REASONABLE RATES AND)
CHARGES FOR UTILITY SERVICE DESIGNED)
TO REALIZE A REASONABLE RATE OF)
RETURN ON THE FAIR VALUE OF ITS)
PROPERTY THROUGHOUT THE STATE OF)
ARIZONA)

DOCKET NO. W-20446A-09-0080

IN THE MATTER OF THE APPLICATION OF)
WATER UTILITY OF GREATER TONOPAH)
FOR THE ESTABLISHMENT OF JUST AND)
REASONABLE RATES AND CHARGES FOR)
UTILITY SERVICE DESIGNED TO REALIZE A)
REASONABLE RATE OF RETURN ON THE)
FAIR VALUE OF ITS PROPERTY)
THROUGHOUT THE STATE OF ARIZONA)

DOCKET NO. W-02450A-09-0081

IN THE MATTER OF THE APPLICATION OF)
VALENCIA WATER COMPANY-TOWN)
DIVISION FOR THE ESTABLISHMENT OF)
JUST AND REASONABLE RATES AND)
CHARGES FOR UTILITY SERVICE DESIGNED)
TO REALIZE A REASONABLE RATE OF)
RETURN ON THE FAIR VALUE OF ITS)
PROPERTY THROUGHOUT THE STATE OF)
ARIZONA)

DOCKET NO. W-01212A-09-0082

DIRECT

TESTIMONY

OF

JIAN W. LIU

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

OCTOBER 26, 2009

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Engineering Report for Valencia Water Company - Greater Buckeye Division	JWL-1
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INTRODUCTION

Q. Please state your name and business address.

A. My name is Jian W. Liu. My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. By whom and in what position are you employed?

A. I am employed by the Arizona Corporation Commission ("Commission" or "ACC") as a Utilities Engineer - Water/Wastewater in the Utilities Division.

Q. How long have you been employed by the Commission?

A. I have been employed by the Commission since October 2005.

Q. What are your responsibilities as a Utilities Engineer - Water/Wastewater?

A. My main responsibilities are to inspect, investigate and evaluate water and wastewater systems. This includes obtaining data, preparing reconstruction cost new and/or original cost studies, investigative reports, interpreting rules and regulations, and to suggest corrective action and provide technical recommendations on water and wastewater system deficiencies. I also provide written and oral testimony in rate cases and other cases before the Commission.

Q. How many companies have you analyzed for the Utilities Division?

A. I have analyzed more than 40 companies fulfilling these various responsibilities for Utilities Division Staff ("Staff").

Q. Have you previously testified before this Commission?

A. Yes, I have testified on numerous occasions before this Commission.

1 **Q. What is your educational background?**

2 A. I am a Ph.D. Candidate in Geotechnical Engineering from Arizona State University
3 ("ASU"). I have a Master of Science Degree in Natural Science from ASU and a Master
4 of Science Degree in Civil Engineering from Institute of Rock & Soil Mechanics
5 ("IRSM"), Academy of Sciences, China.
6

7 **Q. Briefly describe your pertinent work experience.**

8 A. From 1982 to 2000, I was employed by IRSM, SCS Engineers, and URS Corporation as a
9 Civil and Environmental Engineer. In 2000, I joined the Arizona Department of
10 Environmental Quality ("ADEQ"). My responsibilities with ADEQ included review and
11 approval of water distribution systems, sewer distribution systems, and on-site wastewater
12 treatment facilities. I remained with ADEQ until transferring to the Commission in
13 October 2005.
14

15 **Q. Please state your professional membership, registrations, and licenses.**

16 A. I am a licensed professional civil engineer in the State of Arizona.
17

18 **PURPOSE OF TESTIMONY**

19 **Q. What was your assignment in this rate proceeding?**

20 A. My assignment was to provide Staff's engineering evaluation of the subject rate
21 proceeding. I reviewed the Company's application and responses to data requests, and I
22 inspected the water and wastewater systems. This testimony and its attachments present
23 Staff's engineering evaluation.

1 **Q. What is the purpose of your testimony in this proceeding?**

2 A. To present the findings of Staff's engineering evaluation of the Company's rate
3 application. The findings are contained in the Engineering Reports that I have prepared
4 for this proceeding. The reports are included as Exhibits JWL-1 through JWL-6 in this
5 pre-filed testimony.

6
7 **ENGINEERING REPORTS**

8 **Q. Please describe the information contained in your Engineering Reports.**

9 A. The Reports are divided into three general sections: 1) *Executive Summary*; 2)
10 *Engineering Report Discussion*, and 3) *Engineering Report Exhibits*. The *Discussions*
11 section for Water Systems can be further divided into ten subsections: A) Location of
12 Company; B) Description of the Water System; C) Maricopa County Environmental
13 Services Department ("MCESD") Compliance or ADEQ Compliance; D) ACC
14 Compliance; E) Arizona Department Of Water Resources ("ADWR") compliance; F)
15 Water Testing Expenses, G) Water Usage, H) Growth; I) Depreciation Rates; J) Other
16 Issues. The *Discussions* section for Wastewater System is divided into eight subsections:
17 A) Location of Company; B) Description of the Wastewater System; C) Wastewater Flow;
18 D) Growth; E) ADEQ Compliance; F) ACC Compliance; G) Depreciation Rates; H) Other
19 Issues.

20
21 **RECOMMENDATIONS AND CONCLUSIONS**

22 **Q. What are Staff's conclusions and recommendations regarding the Company's**
23 **operations?**

24 A. Staff's conclusions and recommendations regarding the Company's operations are listed
25 below.

Valencia Water Company - Greater Buckeye Division ("Valencia Greater Buckeye")

CONCLUSIONS:

1. ADEQ or its formally delegated agent, MCESD, reported that the Valencia Greater Buckeye drinking water systems are in compliance with regulatory agency requirements and are currently delivering water that meets State and Federal drinking water quality standards required by the Arizona Administrative Code, Title 18, Chapter 4.
2. Valencia Greater Buckeye is located in the Phoenix Active Management Area ("AMA") and is subject to its reporting and conservation requirements. Staff received an ADWR compliance status report in May 2009. ADWR reported that Valencia Greater Buckeye is currently in compliance with departmental requirements governing water providers and/or community water systems.
3. A check with the Utilities Division Compliance Section showed no delinquent compliance items for Valencia Greater Buckeye.
4. Valencia Greater Buckeye has an approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.
5. Sun Valley/Sweetwater I, PWS #07-195, and Sweetwater II, PWS #07-129 reported water loss as:

Water System	Gallons Pumped	Gallons Sold	Water loss (%)
Sun Valley/ Sweetwater I, PWS #07-195	48,210,000	39,057,000	19.0
Sweetwater II, PWS #07-129	13,305,000*	11,586,000	12.9

*Note: Gallons Purchased.

6. During its field inspection Staff observed old water system (Sweetwater II, PWS #07-129) pumping and storage facilities that were not in service. The old water system facilities that were found not to be used and useful to the Company's provision of service consisted of a well (ADWR ID No. 55-802333), a 157,000 gallon storage tank, two booster pumps, and one 3,400 gallon pressure tank.

RECOMMENDATIONS:

1. Staff recommends that Valencia Greater Buckeye add additional storage with a minimum storage capacity of 150,000 gallons to the Sun Valley/ Sweetwater I water system (ADEQ Public Water System ("PWS") #07-195) within one year of the effective date of the order in this proceeding. Staff further recommends that the Company file as a compliance item

1 in this docket within one year of the effective date of the order in this proceeding a copy
2 of the Approval of Construction ("AOC") issued by ADEQ or MCESD for this storage
3 addition.
4

- 5 2. Staff recommends the annual water testing expense of \$3,774 reported by Valencia
6 Greater Buckeye be used for purposes of this application.
- 7 3. Staff recommends that within 90 days of a Decision in this matter Valencia Greater
8 Buckeye file with Docket Control, as a compliance item in this docket, a detailed plan
9 demonstrating how the Sun Valley/Sweetwater I, PWS #07-195, and Sweetwater II, PWS
10 #07-129 will reduce its water loss to less than 10 percent. If Valencia Greater Buckeye
11 finds that reduction of water loss to less than 10 percent is not cost-effective, Valencia
12 Greater Buckeye should submit, within 90 days of a Decision in this matter, a detailed cost
13 analysis and explanation demonstrating why water loss reduction to less than 10 percent is
14 not cost-effective. In any event water loss shall not exceed 15 percent.
15
- 16 4. Staff recommends that Valencia Greater Buckeye use the depreciation rates delineated in
17 Table B of Exhibit JWL-1.
18
- 19 5. Staff recommends that the meter and service line installation charges listed under "Staff's
20 Recommendation" in Table C of Exhibit JWL-1 be adopted along with the adoption of an
21 installation charge of "At Cost" for meter sizes of 8-inch and larger.
22

23 ***Water Utility of Greater Tonopah ("WUGT")***
24

25 **CONCLUSIONS:**
26

- 27 1. ADEQ or its formally delegated agent, MCESD, reported that the WUGT drinking water
28 systems are in compliance with regulatory agency requirements and are currently
29 delivering water that meets State and Federal drinking water quality standards required by
30 the Arizona Administrative Code, Title 18, Chapter 4.
31
- 32 2. The Roseview system's current storage capacity of 7,600 is inadequate to serve its 19
33 connections.
34
- 35 3. WUGT is located in the Phoenix AMA and is subject to its reporting and conservation
36 requirements. Staff received an ADWR compliance status report on May 4, 2009.
37 ADWR reported that WUGT is currently in compliance with departmental requirements
38 governing water providers and/or community water systems.
39
- 40 4. A check with the Utilities Division Compliance Section showed no delinquent compliance
41 items for WUGT.
42
- 43 5. WUGT has an approved Curtailment Plan Tariff on file with the Commission.
44
- 45 6. WUGT has a Backflow Prevention Tariff on file with the Commission.

7. Garden City (PWS #07-037), WPE #1, WPE #6 (PWS #07-733), Tufte (PWS #07-617), Buckeye Ranch (PWS #07-618), and Dixie (PWS #07-030) reported water loss as:

Water System	Gallons Pumped	Gallons Sold	Water loss (%)
Garden City, PWS #07-037	2,560,000	1,960,000	23.4
WPE #1, PWS #N/A	499,000	342,000	31.5
WPE #6, PWS #07-733	2,530,000	1,758,000	23.4
Tufte, PWS #07-617	514,000	444,000	13.6
Buckeye Ranch, PWS #07-618	13,929,000	12,521,000	10.1
Dixie, PWS #07-030	5,656,000	4,023,000	28.9

RECOMMENDATIONS:

- Staff recommends that WUGT install a storage tank with a minimum storage capacity of 3,750 gallons for Roseview (PWS #07-082) within one year of the effective date of the order in this proceeding. Staff further recommends that WUGT file, as a compliance item in this docket, within one year of the effective date of the order in this proceeding, a copy of the AOC issued by ADEQ or MCESD for this storage addition.
- Staff recommends that within 90 days of a Decision in this matter WUGT file with Docket Control, as a compliance item in this docket, a detailed plan demonstrating how the Garden City (PWS #07-037), West Phoenix Estates ("WPE") #1, WPE #6 (PWS #07-733), Tufte (PWS #07-617), Buckeye Ranch (PWS #07-618), and Dixie (PWS #07-030) water systems will reduce their water loss to less than 10 percent. If WUGT finds that reduction of water loss to less than 10 percent is not cost-effective in a system, WUGT should submit, within 90 days of a Decision in this matter, a detailed cost analysis and explanation for each system demonstrating why water loss reduction to less than 10 percent is not cost-effective. In any event water loss shall not exceed 15 percent.
- Staff recommends the annual water testing expense of \$11,006 reported by WUGT be used for purposes of this application.
- Staff recommends that WUGT use the depreciation rates delineated in Table B of Exhibit JWL-2.
- Staff recommends that the meter and service line installation charges listed under "Staff's Recommendation" in Table C of Exhibit JWL-2 be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

Valencia Water Company-Town Division ("Valencia-Town")

CONCLUSIONS:

1. ADEQ or its formally delegated agent, MCESD, reported that the Valencia-Town drinking water system (PWS #07-078) is in compliance with regulatory agency requirements and is currently delivering water that meets State and Federal drinking water quality standards required by the Arizona Administrative Code, Title 18, Chapter 4.
2. Valencia-Town is located in the Phoenix AMA and is subject to its reporting and conservation requirements. Staff received an ADWR compliance status report in May 2009. ADWR reported that Valencia-Town is currently in compliance with departmental requirements governing water providers and/or community water systems.
3. Staff concludes that the Valencia-Town drinking water system has adequate production capacity and storage capacity to serve the existing customer base and reasonable growth.
4. Valencia-Town has an approved Curtailment Plan Tariff on file with the Commission.
5. Valencia-Town has a Backflow Prevention Tariff on file with the Commission.
6. A check with the Utilities Division Compliance Section showed no delinquent compliance items for Valencia-Town.

RECOMMENDATIONS:

1. Staff recommends that Valencia-Town use Staff's depreciation rates by individual National Association of Regulatory Utility Commissioners category as delineated in Table B of Exhibit JWL-3.
2. Staff recommends the annual water testing expense of \$33,729 reported by Valencia-Town be used for purposes of this application.
3. Staff recommends that the meter and service line installation charges listed under "Staff's Recommendation" in Table C of Exhibit JWL-3 be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

Santa Cruz Water Company ("Santa Cruz")

CONCLUSIONS:

1. ADEQ regulates the Santa Cruz Water System under ADEQ PWS #11-131. Based on compliance information submitted by Santa Cruz, the system has no deficiencies and

1 ADEQ has determined that the system is currently delivering water that meets water
2 quality standards required by Arizona Administrative Code, Title 18, and Chapter 4.
3 (ADEQ report dated 12/9/08).
4

- 5 2. Santa Cruz is located in the Pinal AMA and is subject to its reporting and conservation
6 requirements. Staff received an ADWR compliance status report in April 2009. ADWR
7 reported that Santa Cruz is currently in compliance with departmental requirements
8 governing water providers and/or community water systems.
9
- 10 3. Staff concludes that Santa Cruz has adequate production capacity and storage capacity to
11 serve the existing customer base and reasonable growth.
12
- 13 4. A check with the Utilities Division Compliance Section showed no delinquent compliance
14 items for Santa Cruz.
15
- 16 5. Staff inspected Santa Cruz's Southwest Water Treatment and Distribution Plant
17 (Terrazzo). This Plant was not in service and therefore not used and useful during Staff's
18 field inspection.
19
- 20 6. Santa Cruz has approved Curtailment Plan and Backflow Prevention Tariffs on file with
21 the Commission.
22

23 **RECOMMENDATIONS:**

- 24
- 25 1. Staff recommends that Santa Cruz use Staff's depreciation rates by individual National
26 Association of Regulatory Utility Commissioners category as delineated in Table B of
27 Exhibit JWL-4.
28
- 29 2. Staff recommends the annual water testing expense of \$36,113 reported by Santa Cruz be
30 used for purposes of this application.
31
- 32 3. Staff recommends that the charges listed under "Staff's Recommendation" in Table C of
33 Exhibit JWL-4 be adopted along with the adoption of an installation charge of "At Cost"
34 for meter sizes of 8-inch and larger.
35

36 *Willow Valley Water ("Willow Valley")*

37 **CONCLUSIONS:**

- 38
- 39
- 40 1. ADEQ regulates Willow Valley Water Systems under ADEQ Public Water System
41 ("PWS") #08-040 and #08-129. Based on compliance information submitted by Willow
42 Valley, the systems have no deficiencies and ADEQ has determined that these systems are
43 currently delivering water that meets water quality standards required by Arizona
44 Administrative Code, Title 18, and Chapter 4. (ADEQ reports dated February 13, 2009).
45

2. Willow Valley is not located in any AMA and is not subject to any AMA reporting and conservation requirements. Staff received an ADWR compliance status report on April 30, 2009, ADWR reported that it has determined that Willow Valley is currently in compliance with departmental requirements governing water providers and/or community water systems.
3. A check with the Utilities Division Compliance Section showed no delinquent compliance items for Willow Valley.
4. Willow Valley has an approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.
5. King Street, PWS #08-040, and Lake Cimarron, PWS #08-129 reported water loss as:

Water System	Gallons Pumped	Gallons Sold	Water loss (%)
King Street, PWS #08-040	115,312,000	91,995,000	16.8*
Lake Cimarron, PWS #08-129	13,543,000	10,379,000	20.4**

* 3,924,000 gallons of water used for flushing;

** 405,000 gallons of water used for flushing.

RECOMMENDATIONS:

1. Staff recommends that within 90 days of a Decision in this matter Willow Valley file with Docket Control, as a compliance item in this docket, a detailed plan demonstrating how Willow Valley will reduce its water loss for King Street, PWS #08-040, and Lake Cimarron, PWS #08-129 to less than 10 percent. If Willow Valley finds that reduction of water loss to less than 10 percent is not cost-effective, Willow Valley should submit, within 90 days of a Decision in this matter, a detailed cost analysis and explanation demonstrating why water loss reduction to less than 10 percent is not cost-effective. In any event water loss shall not exceed 15 percent.
2. Staff recommends the annual water testing expense of \$5,401 reported by Willow Valley be used for purposes of this application.
3. Staff recommends that Willow Valley use the depreciation rates delineated in Table B of Exhibit JWL-5.
4. Staff recommends that the meter and service line installation charges listed under "Staff's Recommendation" in Table C of Exhibit JWL-5 be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

Palo Verde Utilities Company ("Palo Verde")

CONCLUSIONS:

1. ADEQ regulates the Palo Verde wastewater treatment plant under Permit No. 34460. Per the January 29, 2009, Compliance Status Report issued by ADEQ, the Palo Verde plant is in full compliance with ADEQ requirements.
2. A check with the Utilities Division Compliance Section showed no delinquent compliance items for Palo Verde.
3. Staff inspected Palo Verde's 1.0 MGD SBR treatment facility. This Plant was not in service and therefore not used and useful during Staff's field inspection.
4. Staff inspected Palo Verde's 0.3 MGD facultative lagoon. This facility was not in service and therefore not used and useful during Staff's field inspection.

RECOMMENDATIONS:

1. It is recommended that Palo Verde use depreciation rates by individual NARUC category as presented in Table G-1 of Exhibit JWL-6.
2. Staff recommends the annual testing expense of \$99,923 reported by Palo Verde be used for purposes of this application.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

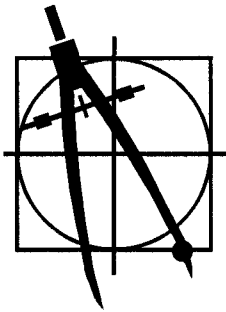
EXHIBIT JW-1

**ENGINEERING REPORT FOR VALENCIA WATER COMPANY –
GREATER BUCKEYE DIVISION**

DOCKET NO. W-02451A-09-0078 (RATES)

JIAN W LIU

OCTOBER 13, 2009



Engineering Report for VALENCIA WATER COMPANY - GREATER BUCKEYE DIVISION

Docket No. W-02451A-09-0078 (Rates)

By: **Jian Liu**
Utilities Engineer

October 13, 2009

CONCLUSIONS

1. Arizona Department of Environmental Quality ("ADEQ") or its formally delegated agent, the Maricopa County Environmental Services Department ("MCESD"), reported that the Valencia Greater Buckeye drinking water systems are in compliance with regulatory agency requirements and are currently delivering water that meets State and Federal drinking water quality standards required by the Arizona Administrative Code, Title 18, Chapter 4.
2. Valencia Greater Buckeye is located in the Phoenix Active Management Area ("AMA") and is subject to its AMA reporting and conservation requirements. Staff received an ADWR compliance status report in May 2009. ADWR reported that Valencia Greater Buckeye is currently in compliance with departmental requirements governing water providers and/or community water systems.
3. A check with the Utilities Division Compliance Section showed no delinquent compliance items for Valencia Greater Buckeye.
4. Valencia Greater Buckeye has approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.
5. Sun Valley/Sweetwater I, PWS #07-195, and Sweetwater II, PWS #07-129 reported water loss as:

Water System	Gallons Pumped	Gallons Sold	Water loss (%)
Sun Valley/ Sweetwater I, PWS #07-195	48,210,000	39,057,000	19.0
Sweetwater II, PWS #07-129	13,305,000*	11,586,000	12.9

*Note: Gallons Purchased.

6. During its field inspection Staff observed old water system (Sweetwater II, PWS #07-129) pumping and storage facilities that were not in service. The old water system

facilities that were found not to be used and useful to the Company's provision of service consisted of a well (ADWR ID No. 55-802333), a 157,000 gallon storage tank, two booster pumps, and one 3,400 gallon pressure tank.

RECOMMENDATIONS

1. Staff recommends that the Company add additional storage with a minimum storage capacity of 150,000 gallons to the Sun Valley/ Sweetwater I water system (PWS #07-195) within one year of the effective date of the order in this proceeding. Staff further recommends that the Company file as a compliance item in this docket within one year of the effective date of the order in this proceeding a copy of the Approval of Construction ("AOC") issued by ADEQ for this storage addition.
2. Staff recommends the annual water testing expense of \$3,774 reported by the Company be used for purposes of this application.
3. Staff recommends that within 90 days of a Decision in this matter the Company file with Docket Control, as a compliance item in this docket, a detailed plan demonstrating how the Sun Valley/Sweetwater I, PWS #07-195, and Sweetwater II, PWS #07-129 will reduce its water loss to less than 10 percent. If the Company finds that reduction of water loss to less than 10 percent is not cost-effective, the Company should submit, within 90 days of a Decision in this matter, a detailed cost analysis and explanation demonstrating why water loss reduction to less than 10 percent is not cost-effective. In any event, water loss shall not exceed 15 percent.
4. Staff recommends that the Company use the depreciation rates delineated in Table B on a going forward bases.
5. Staff recommends that the charges listed under "Staff's Recommendation" in Table C be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

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A. LOCATION OF COMPANY

Valencia Water Company - Greater Buckeye Division ("Valencia Greater Buckeye" or "Company") is located approximately 40 miles west of downtown Phoenix in Maricopa County with a certificated area covering approximately 4,300 acres. Figure 1 shows the location of Valencia Greater Buckeye within Maricopa County and Figure 2 shows the certificated area which consists of separate parcels in and around the Town of Buckeye.

B. DESCRIPTION OF THE WATER SYSTEMS

The plant facilities were visited on Aug 3rd and 4th, 2009, by Jian Liu, Staff Utilities Engineer, in the accompaniment of Ron Fleming, and James Taylor of the Company. The Company operates four independent water systems with brief descriptions as follows:

1. Sun Valley/ Sweetwater I, PWS #07-195: This system consists of a well (equipped with a 20 horsepower ("Hp") submersible pump producing 300 gallons per minute ("gpm")) that pumps water into a 125,000 gallon storage tank, three booster pumps then pump the water to a 3,000 gallon pressure tank before delivery to customers through the distribution system. This system serves 408 service connections.
2. Sweetwater II, PWS #07-129: This system is currently being operated as a consecutive water system to the City of Goodyear. During its field inspection Staff observed old water system pumping and storage facilities that were not in service. The old water system facilities that were found not to be used and useful to the Company's provision of service consisted of a well (ADWR ID No. 55-802333), a 157,000 gallon storage tank, two booster pumps, and one 3,400 gallon pressure tank. This system serves 95 service connections.
3. Bulfer/ Primrose, PWS #07-114: This system consists of 1 well (producing approximately 40 gpm) that pumps water into a 130,000 gallon storage tank, three booster pumps then pump the water to a 2,400 gallon pressure tank before delivery to customers through distribution system. This system serves 92 service connections.
4. Sonoran Ridge, PWS #07-732: This system consists of a well (producing approximately 180 gpm), one arsenic treatment system, a 250,000 gallon storage tank, 5,000 gallon pressure tank and distribution system. This system serves 58 service connections.

Combined detailed plant facility listings are as follows:

Table 1. Well Data (active wells only)

Location/No.	ADWR ID #	Pump Hp	Pump GPM	Casing Size	Casing Depth (Feet)	Meter Size
Sun Valley/ Sweetwater I	55-800947	20	300	16 - 20"	747	1 1/2"
Bulfer/ Primrose	55-618513	5	40	8"	273	1 1/2"
Sonoran Ridge	55-572657	40	180	6"	700	4"

Sun Valley/ Sweetwater I, PWS #07-195

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
125,000	1	3,000	1	20	1
				25	2
Total 125,000					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
4	12,305	5/8x3/4	394	42
6	73,265	3/4	7	
8	13,825	1	7	
10	2,268	2		
		Comp.3		
		Comp.4		
		Total	408	

Bulfer/ Primrose, PWS #07-114

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
130,000	1	2,400	1	25	1
				10	2
Total 130,000					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
4	1,321	5/8x3/4	81	10
6	563	3/4	3	
8	5,534	1	8	
Unknown	6,655	2		
		Comp.3		
		Comp.4		
		Total	92	

Sonoran Ridge, PWS #07-732

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
250,000	1	5,000	1	40	3
				150	2
Total 250,000					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
4		5/8x3/4	18	23
6	117	3/4	1	
8	6,031	1	39	
10	4,468	2		
12	640	Comp.3		
16	91	Comp.4		
		Total	58	

C. WATER USE

Water Sold

Based on the information provided by the Company on its Water Use Data Sheets, water use for the year 2008 is presented below for each system.

Water Use, gallons per day ("GPD") per connection

System	High/Mo.	Low/Mo.	Average
Sun Valley/ Sweetwater I	375 in June	179 in Mar.	269
Bulfer/ Primrose	443 in Aug.	223 in Dec.	333
Sonoran Ridge	1,604 in Apr.	250 in Dec.	754
Sweetwater II	472 in Sept.	225 in Mar.	336

Non-Account Water

For each water system, the Company reported the following gallons pumped and gallons sold in 2008, which Staff used to determine the water loss per system:

Table 2. Water Loss

Water System	Gallons Pumped	Gallons Sold	Water loss (%)
Sun Valley/ Sweetwater I, PWS #07-195	48,210,000	39,057,000	19.0
Bulfer/ Primrose, PWS #07-114	11,970,000	11,178,000	6.6
Sonoran Ridge, PWS #07-732	14,762,000	13,384,000	9.3
Sweetwater II, PWS #07-129	13,305,000*	11,586,000	12.9

*Note: Gallons Purchased.

Non-account water should be 10 percent or less and never more than 15 percent. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, theft, and flushing. Staff recommends that within 90 days of a Decision in this matter the Company file with Docket Control, as a compliance item in this docket, a detailed plan demonstrating how the Sun Valley/Sweetwater I, PWS #07-195, and Sweetwater II, PWS #07-129 will reduce its water loss to less than 10 percent. If the Company finds that reduction of water loss to less than 10 percent is not cost-effective, the Company should submit, within 90 days of a Decision in this matter, a detailed cost analysis and explanation demonstrating why water loss reduction to less than 10 percent is not cost-effective. In any event water loss shall not exceed 15 percent.

System Analysis

1. Sun Valley/Sweetwater I, PWS #07-195

The Sun Valley/Sweetwater I has well capacity of 300 gpm and storage capacity of 125,000 gallons. Staff recommends that the Company add additional storage with a minimum storage capacity of 150,000 gallons to the Sun Valley/Sweetwater I water system (PWS #07-195) within one year of the effective date of the order in this proceeding. Staff further recommends that the Company file as a compliance item in this docket within one year of the effective date of the order in this proceeding a copy of the Approval of Construction ("AOC") issued by the Arizona Department of Environmental Quality ("ADEQ") for this storage addition.

Staff concludes that the other Valencia Greater Buckeye water systems have adequate production capacity and storage capacity to serve the existing customer base and reasonable growth.

D. GROWTH

In July 2009, the Company had 600 active customers, and 62 vacant units within its certificated service area. The Company estimates that the customer base will grow at approximately 1 percent per year for the next 5 years. Using the Company's estimate of projected growth the Company will be serving 708 customers in 2013.

E. ADEQ COMPLIANCE

Compliance

ADEQ or its formally delegated agent, the Maricopa County Environmental Services Department ("MCESD"), reported that the Valencia Greater Buckeye drinking water systems are in compliance with regulatory agency requirements and are currently delivering water that meets State and Federal drinking water quality standards required by the Arizona Administrative Code, Title 18, Chapter 4.¹

Water Testing Expense

The Company reported its total water testing expense as \$3,774.05 during the test year, and provided those expenses in tabular form as follows. Staff reviewed this reported amount and supporting documentation. Staff recommends the annual water testing expense of \$3,774 reported by the Company be used for purposes of this application.

¹ MCESD Status Reports from May to July 2009 were used to determine compliance.

Table A. Water Testing Cost

Valencia, Greater Buckeye Division - 2008 Testing Expense

Description	Total
Legend Technical Services	2,635.23
GW Lab Services	1,035.00
TestAmerica Laboratories, Inc	103.82
Grand Total	3,774.05

F. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

Valencia Greater Buckeye is located in the Phoenix Active Management Area ("AMA") and is subject to its AMA reporting and conservation requirements. Staff received an ADWR compliance status report in May 2009. ADWR reported that Valencia Greater Buckeye is currently in compliance with departmental requirements governing water providers and/or community water systems.

G. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check with the Utilities Division Compliance Section showed no delinquent compliance items for Valencia Greater Buckeye.

H. DEPRECIATION RATES

Staff has developed typical and customary depreciation rates within a range of anticipated equipment life. These rates are presented in Table B. It is recommended that the Company use depreciation rates by individual National Association of Regulatory Utility Commissioners ("NARUC") category, as delineated in Table B.

Table B. Depreciation Rates

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	3	33.33
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	----	----

NOTES:

- These depreciation rates represent average expected rates. Water companies may experience different rates due to variations in construction, environment, or the physical and chemical characteristics of the water.
- Acct. 348, Other Tangible Plant may vary from 5% to 50%. The depreciation rate would be set in accordance with the specific capital items in this account.

I. OTHER ISSUES

1. Curtailment and Backflow Prevention Tariffs

The Company has approved Curtailment and Backflow Prevention tariffs on file with the ACC.

2. Service Line and Meter Installation Charges

The Company requested permission to change its service line and meter installation charges. These charges are refundable advances and the Company's proposed charges are within Staff's recommended range for these charges. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, separate service line and meter charges have been developed by Staff. Staff recommends that the charges listed under "Staff's Recommendation" in Table C be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

Table C. Service Line and Meter Installation Charges

Meter Size	Current Charges	Proposed Charges	Staff recommended Service Line Charges	Staff ⁽¹⁾ recommended Meter Charges	Staff ⁽²⁾ recommended Total Charges
5/8 x3/4-inch	485	\$600	\$445	\$155	\$600
3/4-inch	485	\$700	\$445	\$255	\$700
1-inch	570	\$810	\$495	\$315	\$810
1-1/2-inch	740	\$1075	\$550	\$525	\$1075
2-inch Turbine	1,235	\$1,875	\$830	\$1045	\$1,875
2-inch Compound	1,235	\$2,720	\$830	\$1,890	\$2,720
3-inch Turbine	2,340	\$2,715	\$1045	\$1,670	\$2,715
3-inch Compound	2,340	\$3,710	\$1165	\$2,545	\$3,710
4-inch Turbine	2,700	\$4,160	\$1,490	\$2,670	\$4,160
4-inch Compound	2,700	\$5,315	\$1,670	\$3,645	\$5,315
6-inch Turbine	5,035	\$7,235	\$2,210	\$5,025	\$7,235
6-inch Compound	5,035	\$9,250	\$2,330	\$6,920	\$9,250
8-inch & Larger	N/A	At Cost	At Cost	At Cost	At Cost

(1). Meter charge includes meter box or vault.

(2). Costs for boring under highway or pavement are additional, at cost.

MARICOPA COUNTY

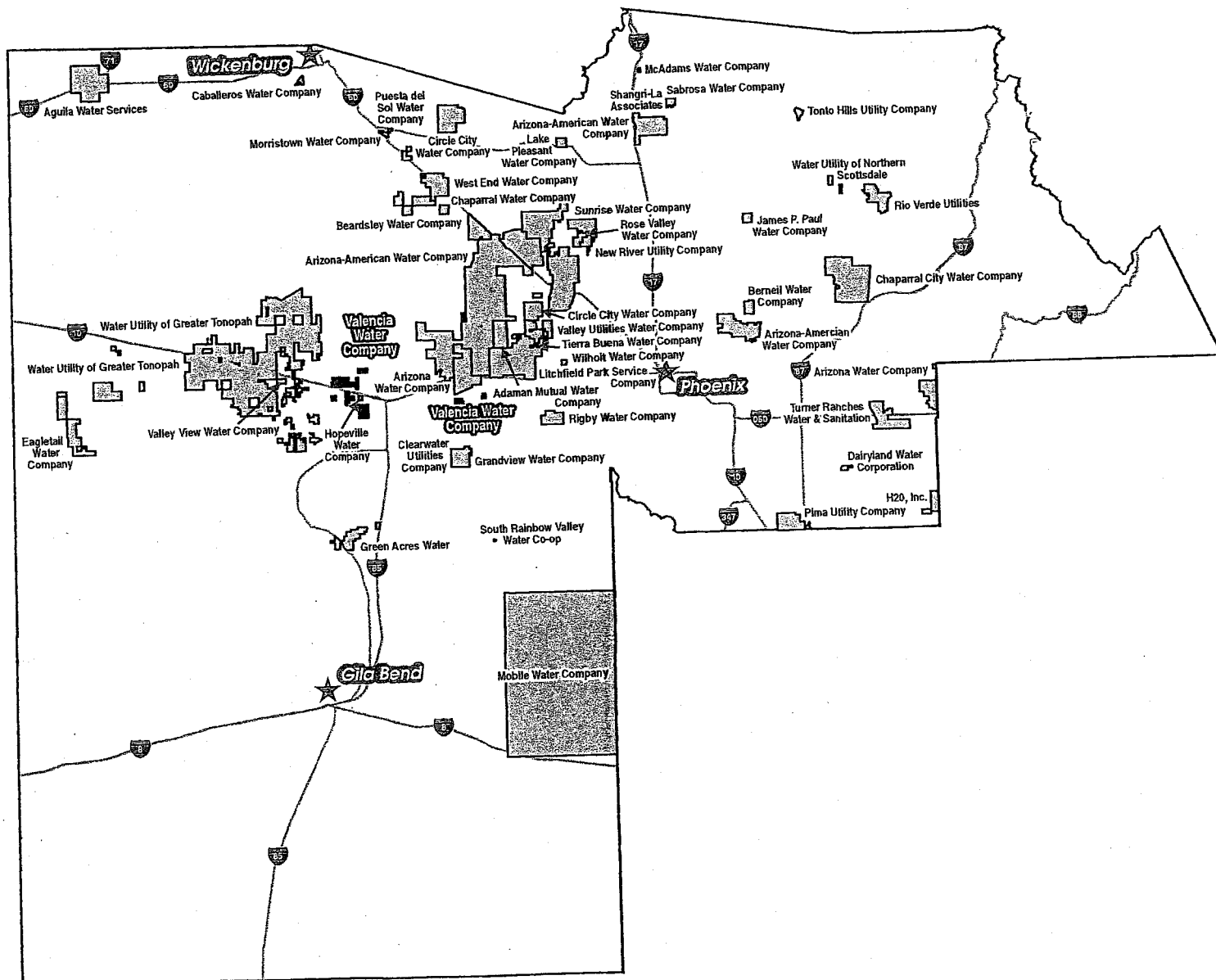


Figure 1: County Map

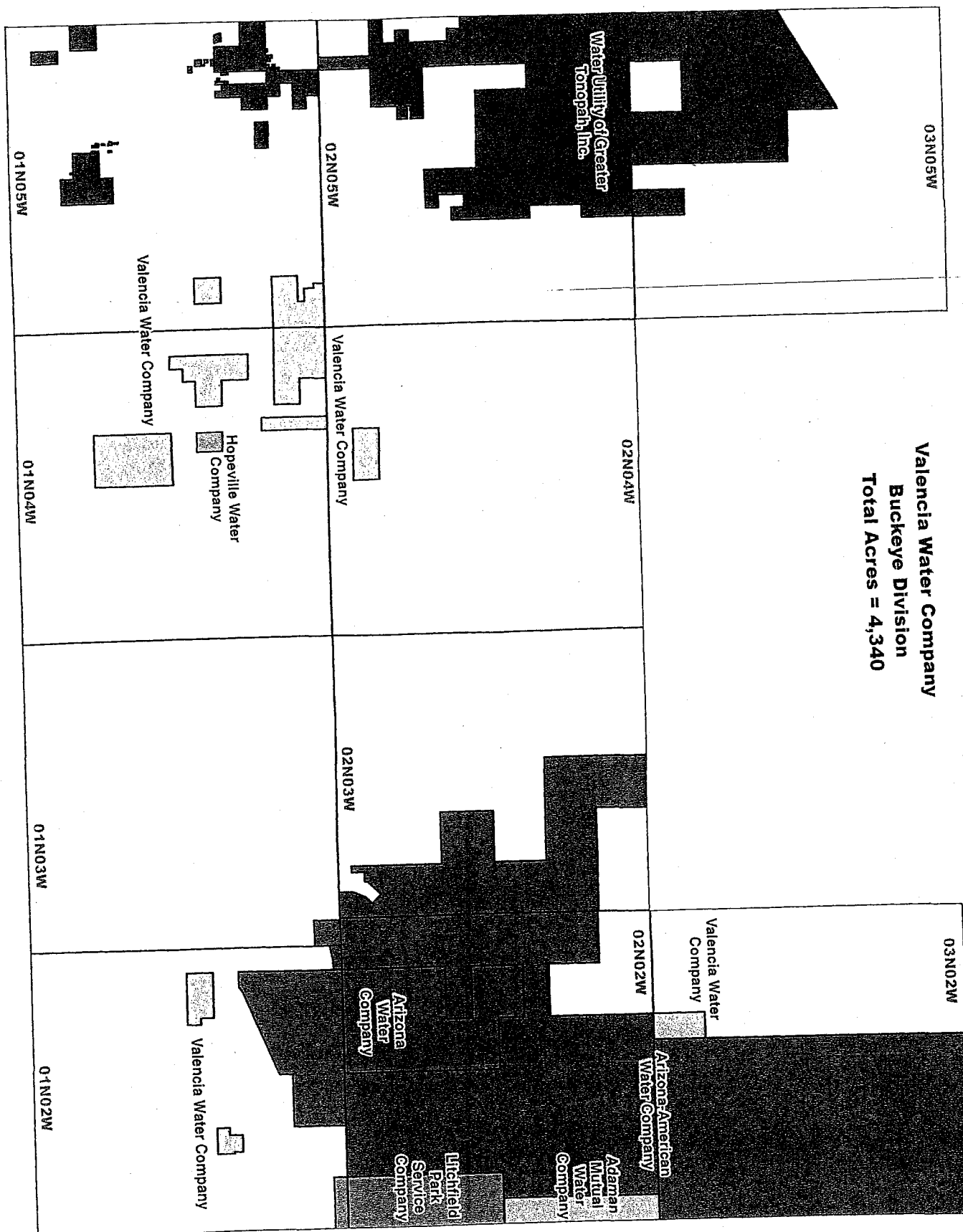


Figure 2: Certificated Area

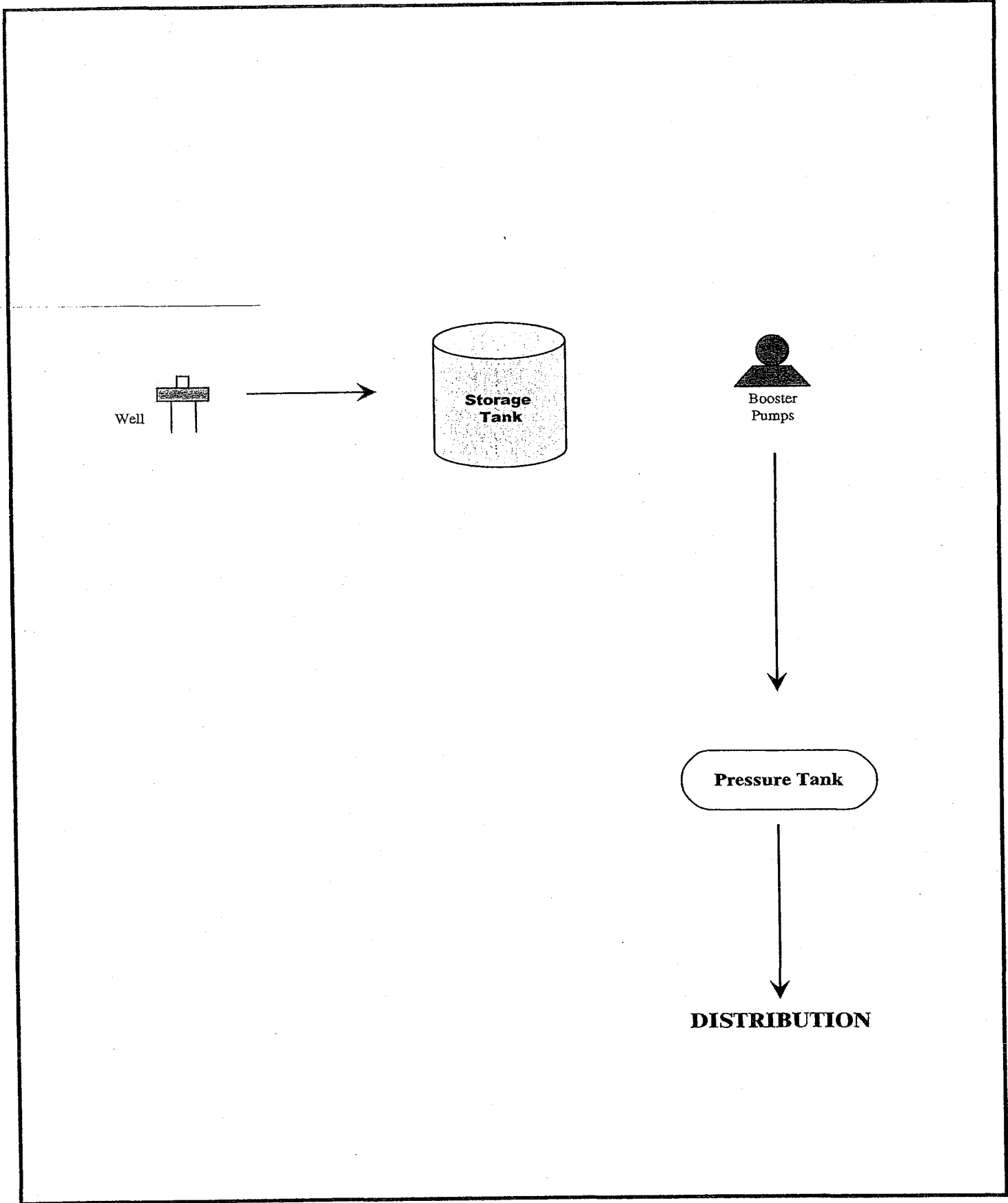


Figure 3: General System Schematic

EXHIBIT JW-2

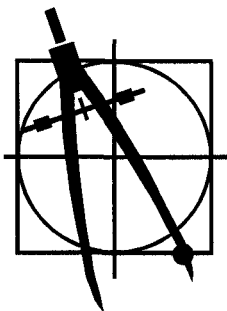
ENGINEERING REPORT FOR

WATER UTILITY OF GREATER TONOPAH, INC.

DOCKET NO. W-02450A-09-0081 (RATES)

JIAN W LIU

OCTOBER 13, 2009



Engineering Report for WATER UTILITY OF GREATER TONOPAH, INC.

Docket No. W-02450A-09-0081 (Rates)

By: **Jian Liu**
Utilities Engineer

October 13, 2009

CONCLUSIONS

1. ADEQ or its formally delegated agent, the Maricopa County Environmental Services Department ("MCESD"), reported that the WUGT drinking water systems are in compliance with regulatory agency requirements and are currently delivering water that meets State and Federal drinking water quality standards required by the Arizona Administrative Code, Title 18, Chapter 4.
2. The Roseview system's current storage capacity of 7,600 gallons is inadequate to serve its 19 connections.
3. WUGT is located in the Phoenix Active Management Area ("AMA") and is subject to its AMA reporting and conservation requirements. Staff received an ADWR compliance status report on May 4, 2009. ADWR reported that WUGT is currently in compliance with departmental requirements governing water providers and/or community water systems.
4. A check with the Utilities Division Compliance Section showed no delinquent compliance items for WUGT.
5. The Company has an approved Curtailment Plan Tariff on file with the Commission.
6. The Company has a Backflow Prevention Tariff on file with the Commission.
7. Garden City (PWS #07-037), WPE #1, WPE #6 (PWS #07-733), Tufte (PWS #07-617), Buckeye Ranch (PWS #07-618), and Dixie (PWS #07-030) reported water loss as:

Water System	Gallons Pumped	Gallons Sold	Water loss (%)
Garden City, PWS #07-037	2,560,000	1,960,000	23.4
WPE #1, PWS #N/A	499,000	342,000	31.5
WPE #6, PWS #07-733	2,530,000	1,758,000	23.4

Tufte, PWS #07-617	514,000	444,000	13.6
Buckeye Ranch, PWS #07-618	13,929,000	12,521,000	10.1
Dixie, PWS #07-030	5,656,000	4,023,000	28.9

RECOMMENDATIONS

1. Staff recommends that the Company install a storage tank with a minimum storage capacity of 3,750 gallons for Roseview (PWS #07-082) within one year of the effective date of the order in this proceeding. Staff further recommends that the Company file, as a compliance item in this docket, within one year of the effective date of the order in this proceeding, a copy of the Approval of Construction ("AOC") issued by ADEQ or MCESD.
2. Staff recommends that within 90 days of a Decision in this matter the Company file with Docket Control, as a compliance item in this docket, a detailed plan demonstrating how the Garden City (PWS #07-037), WPE #1, WPE #6 (PWS #07-733), Tufte (PWS #07-617), Buckeye Ranch (PWS #07-618), and Dixie (PWS #07-030) will reduce its water loss to less than 10 percent. If the Company finds that reduction of water loss to less than 10 percent is not cost-effective, the Company should submit, within 90 days of a Decision in this matter, a detailed cost analysis and explanation for each system demonstrating why water loss reduction to less than 10 percent is not cost-effective. In any event water loss shall not exceed 15 percent.
3. Staff recommends the annual water testing expense of \$11,006 reported by the Company be used for purposes of this application.
4. Staff recommends that the Company use the depreciation rates delineated in Table B on a going forward basis.
5. Staff recommends that the charges listed under "Staff's Recommendation" in Table C be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

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A. LOCATION OF COMPANY

Water Utility of Greater Tonopah, Inc. ("WUGT" or "Company") is located approximately 60 miles west of downtown Phoenix in Maricopa County with a certificated area covering approximately 65,600 acres, or approximately 102 square miles. Figure 1 shows the location of WUGT within Maricopa County and Figure 2 shows the certificated area.

B. DESCRIPTION OF THE WATER SYSTEMS

The plant facilities were visited on Aug 3rd and 4th, 2009, by Jian Liu, Staff Utilities Engineer, in the accompaniment of Ron Fleming, and James Taylor of the Company. The Company operates eight independent water systems with brief descriptions as follows:

1. Garden City, PWS #07-037: This system consists of a well (equipped with a 5 horsepower ("Hp") submersible pump producing 30 gallons per minute ("gpm")) that pumps water into two 12,000 gallon storage tanks, a booster pump then pumps the water to a 2,000 gallon pressure tank before delivery to customers through the distribution system. This system serves 18 service connections.
2. Roseview, PWS #07-082: This system consists of a well (equipped with a 5 Hp submersible pump producing 30 gpm) that pumps water into a 7,600 gallon storage tank, two booster pumps then pump the water to a 1,000 gallon pressure tank before delivery to customers through the distribution system. This system serves 19 service connections. There is a point of use reverse osmosis arsenic treatment system (Watts R.O. KO4) for each service connection.
3. WPE #1, PWS #N/A: This system consists of 1 well (producing approximately 127 gpm) that pumps water into a 5,000 gallons of storage, a booster pump then pumps the water to two 30 gallon pressure tanks before delivery to customers through the distribution system. This system serves 9 service connections. There is a point of use reverse osmosis arsenic treatment system (Watts R.O. KO4) for each service connection.
4. WPE #6, PWS #07-733: This system consists of a well (producing approximately 20 gpm), one arsenic/fluoride treatment system, two storage tanks (one 18,000 gallon, and one 9,500 gallon), a 2,000 gallon pressure tank and distribution system. This system serves 29 service connections.
5. Tufte, PWS #07-617: This system consists of a well (equipped with a 2 Hp submersible pump producing 20 gpm) that pumps water into a 5,400 gallon storage tank, a booster pump then pumps the water to an 800 gallon pressure tank before delivery to customers through the distribution system. This system serves 6 service connections. There is a point of use reverse osmosis arsenic treatment system (Watts R.O. KO4) for each service connection.

WATER UTILITY OF GREATER TONOPAH, INC.

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6. Buckeye Ranch, PWS #07-618: This system consists of a well (producing approximately 150 gpm), one arsenic treatment system, one 222,000 gallon storage tank, a 5,000 gallon pressure tank and distribution system. This system serves 97 service connections.
7. Dixie, PWS #07-030: This system consists of a well (equipped with two 5 Hp submersible pumps producing 80 gpm) that pumps water into two storage tanks (one 10,000 gallons, and one 5,000 gallons), a booster pump then pumps the water to a 500 gallon pressure tank before delivery to customers through the distribution system. This system serves 41 service connections.
8. Sunshine, PWS #07-071: This system consists of a well (producing approximately 100 gpm), one arsenic treatment system, one 100,000 gallon storage tank, a 5,000 gallon pressure tank and distribution system. This system serves 144 service connections.

Combined detailed plant facility listings are as follows:

Table 1. Well Data (active wells only)

Location/No.	ADWR ID #	Pump Hp	Pump GPM	Casing Size	Casing Depth (Feet)	Meter Size	Year Drilled
Garden City	55-804131	5	30	8"	927	2"	1961
Roseview	55-802143	5	30	16"	1000	1 1/2"	1960
WPE #1	55-600209	3	127	8"	365	2"	1967
WPE #6	55-802145	7.5	20	8"	600	1 1/2"	1978
Tufte	55-802144	2	20	8"	400	2"	1977
Buckeye Ranch	55-802962	10	150	16"	900	4"	1955
Dixie	55-639586	2X2	80	16"	367	2"	1948
Sunshine	55-802141	7.5	100	8"	200	3"	1976

Garden City, PWS #07-037

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
12,000	2	2,000	1	5	1
Total 24,000					

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Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
4	15,663	5/8x3/4	14	
6	4,557	3/4		
		1	3	
		1.5	1	
		Total	18	

Roseview, PWS #07-082

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
7,600	1	1,000	1	3	2
Total 7,600					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
		5/8x3/4	18	
6	6,494	3/4	1	
		1		
		Total	19	

WPE #1, PWS #N/A

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
5,000	1	30	2	5	1
Total 5,000					

WATER UTILITY OF GREATER TONOPAH, INC.

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Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
		5/8x3/4	7	
4	33,106	3/4		
		1	2	
		Total	9	

WPE #6, PWS #07-733

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
18,000	1	2,000	1	7.5	2
9,500	1				
Total 27,500					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
4	36,511	5/8x3/4	29	
6	2,608	3/4		
8	8,528	1		
		Total	29	

Tufte, PWS #07-617

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
5,400	1	800	1	5	1
Total 5,400					

WATER UTILITY OF GREATER TONOPAH, INC.

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Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
2	41	5/8x3/4	6	
4	579	3/4		
6	4,317	1		
		Total	6	

Buckeye Ranch, PWS #07-618

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
222,000	1	5,000	1	7.5	1
				10	3
Total 222,000				100	1

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
4	31,317	5/8x3/4	94	14
6	8,488	3/4		
8	7,776	1	1	
Unknown	62	2	1	
		3	1	
		Total	97	

Dixie, PWS #07-030

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
10,000	1	500	1	5	1
5,000	1				
Total 15,000					

WATER UTILITY OF GREATER TONOPAH, INC.

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Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
2	10,475	5/8x3/4	39	
3	1,464	3/4		
4	3,553	1	2	
8	2,075			
		Total	41	

Sunshine, PWS #07-071

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
100,000	1	5,000	1	30	2
Total 100,000					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
2	106	5/8x3/4	135	
4	27,155	3/4	2	
6	11,925	1	2	
8	14,659	1.5	1	
12	7,725	2	1	
14	207	6	1	
		Construction	2	
		Total	144	

C. WATER USE**Water Sold**

Based on the information provided by the Company on its Water Use Data Sheets, water use for the year 2008 is presented below for each system.

Water Use, gallons per day ("GPD") per connection

<u>System</u>	<u>High/Mo.</u>	<u>Low/Mo.</u>	<u>Average</u>
Garden City, PWS #07-037	581 in Sept	159 in Mar.	299
Roseview, PWS #07-082	593 in June	137 in Mar.	340
WPE #1, PWS #N/A	163 in Nov	60 in Mar.	121
WPE #6, PWS #07-733	255 in Sept	95 in Mar.	166
Tufte, PWS #07-617	382 in July	124 in Oct.	203
Buckeye Ranch, PWS #07-618	500 in Sept	164 in Jan.	354
Dixie, PWS #07-030	377 in June	156 in Jan.	271
Sunshine, PWS #07-071	444 in June	140 in Mar.	302

Non-Account Water

For each water system, the Company reported the following gallons pumped and gallons sold in 2008, which Staff used to determine the water loss per system:

Table 2. Water Loss

Water System	Gallons Pumped	Gallons Sold	Water loss (%)
Garden City, PWS #07-037	2,560,000	1,960,000	23.4
Roseview, PWS #07-082	2,413,000	2,212,000	8.3
WPE #1, PWS #N/A	499,000	342,000	31.5
WPE #6, PWS #07-733	2,530,000	1,758,000	23.4
Tufte, PWS #07-617	514,000	444,000	13.6
Buckeye Ranch, PWS #07-618	13,929,000	12,521,000	10.1
Dixie, PWS #07-030	5,656,000	4,023,000	28.9
Sunshine, PWS #07-071	16,375,000	15,745,000	3.8

Non-account water should be 10% or less and never more than 15%. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage,

theft; and flushing. Staff recommends that within 90 days of a Decision in this matter the Company file with Docket Control, as a compliance item in this docket, a detailed plan demonstrating how the Garden City (PWS #07-037), WPE #1, WPE #6 (PWS #07-733), Tufte (PWS #07-617), Buckeye Ranch (PWS #07-618), and Dixie (PWS #07-030) will reduce its water loss to less than 10 percent. If the Company finds that reduction of water loss to less than 10 percent is not cost-effective, the Company should submit within, 90 days of a Decision in this matter, a detailed cost analysis and explanation for each system demonstrating why water loss reduction to less than 10 percent is not cost-effective. In any event water loss shall not exceed 15 percent.

System Analysis

1. Roseview, PWS #07-082

The Roseview system's current well capacity of 30 gpm and storage capacity of 7,600 gallons could adequately serve up to 13 connections. However, this system has 19 connections.

Staff recommends that the Company install a storage tank with a minimum storage capacity of 3,750 gallons for Roseview (PWS #07-082) within one year of the effective date of the order in this proceeding. Staff further recommends that the Company file, as a compliance item in this docket, within one year of the effective date of the order in this proceeding, a copy of the Approval of Construction ("AOC") issued by the Arizona Department of Environmental Quality ("ADEQ") or MCESD.

Staff concludes that the other WUGT water systems have adequate production capacity and storage capacity to serve the existing customer base.

D. GROWTH

In July 2009, WUGT had 311 active customers, 60 vacant units. In this changing economic climate it is hard for Staff to predict what level of growth is reasonable. In support of its growth projections WUGT has informed Staff that there are a number of master-planned communities in planning – Belmont, Balterra, Copperleaf, Sierra Negra etc. The Company estimates that the customer base could grow to over 2,000 customers by 2013 if any of the developments materialize as planned. However, if the Company does not improve, the Company estimates 20 customers would be added each year. In this case the customer base would be approximate 500 customers by 2013.

E. ADEQ COMPLIANCE

Compliance

ADEQ or its formally delegated agent, the Maricopa County Environmental Services Department ("MCESD"), reported that the WUGT drinking water systems are in compliance with regulatory agency requirements and are currently delivering water that meets State and Federal drinking water quality standards required by the Arizona Administrative Code, Title 18, Chapter 4. (MCESD reports dated Nov 2008 to July 2009).

Water Testing Expense

The Company reported its total water testing expense as \$11,006.29 during the test year, and provided those expenses in tabular form as follows. Staff reviewed this reported amount and supporting documentation. Staff recommends the annual water testing expense of \$11,006 reported by the Company be used for purposes of this application.

Table 1 Water Testing Cost

WUGT - 2008 Testing Expense

Description	Total
Legend Technical Services	9,740.87
GW Lab Services	1,068.00
TestAmerica Laboratories, Inc	117.42
Metering Services, Inc	80.00
Grand Total	11,006.29

F. ARIZONA DEPARTMENT OF WATER RESOURCES COMPLIANCE

WUGT is located in the Phoenix Active Management Area ("AMA") and is subject to its AMA reporting and conservation requirements. Staff received an ADWR compliance status report on May 4, 2009. ADWR reported that WUGT is currently in compliance with departmental requirements governing water providers and/or community water systems.

G. ARIZONA CORPORATION COMMISSION COMPLIANCE

A check with the Utilities Division Compliance Section showed no delinquent compliance items for WUGT. (ACC Compliance Section Email dated 8/5/09)

H. DEPRECIATION RATES

Staff has developed typical and customary depreciation rates within a range of anticipated equipment life. These rates are presented in Table B. It is recommended that the Company use depreciation rates by individual NARUC category, as delineated in Table B.

WATER UTILITY OF GREATER TONOPAH, INC.

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Table B. Depreciation Rates

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	3	33.33
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
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345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	----	----

NOTES:

- These depreciation rates represent average expected rates. Water companies may experience different rates due to variations in construction, environment, or the physical and chemical characteristics of the water.
- Acct. 348, Other Tangible Plant may vary from 5% to 50%. The depreciation rate would be set in accordance with the specific capital items in this account.

I. OTHER ISSUES**1. Curtailment Plan Tariff**

The Company has an approved Curtailment Plan Tariff on file with the Commission.

2. Backflow Prevention Tariff

The Company has an approved Backflow Prevention Tariff on file with the Commission.

3. Service Line and Meter Installation Charges

The Company requested permission to change its service line and meter installation charges. These charges are refundable advances and the Company's proposed charges are within Staff's recommended range for these charges. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, separate service line and meter charges have been developed by Staff. Staff recommends that the charges listed under "Staff's Recommendation" in Table C be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

Table C. Service Line and Meter Installation Charges

Meter Size	Current Charges	Proposed Charges	Staff recommended Service Line Charges	Staff ⁽¹⁾ recommended Meter Charges	Staff ⁽²⁾ recommended Total Charges
5/8 x3/4-inch	485	\$600	\$445	\$155	\$600
3/4-inch	485	\$700	\$445	\$255	\$700
1-inch	570	\$810	\$495	\$315	\$810
1-1/2-inch	775	\$1075	\$550	\$525	\$1075
2-inch Turbine	1,900	\$1,875	\$830	\$1045	\$1,875
2-inch Compound	1,900	\$2,720	\$830	\$1,890	\$2,720
3-inch Turbine	2,490	\$2,715	\$1045	\$1,670	\$2,715
3-inch Compound	2,490	\$3,710	\$1165	\$2,545	\$3,710
4-inch Turbine	3,615	\$4,160	\$1,490	\$2,670	\$4,160
4-inch Compound	3,615	\$5,315	\$1,670	\$3,645	\$5,315
6-inch Turbine	6,810	\$7,235	\$2,210	\$5,025	\$7,235
6-inch Compound	6,810	\$9,250	\$2,330	\$6,920	\$9,250
8-inch & Larger	N/A	At Cost	At Cost	At Cost	At Cost

(1). Meter charge includes meter box or vault.

(2). Costs for boring under highway or pavement are additional, at cost.

MARICOPA COUNTY

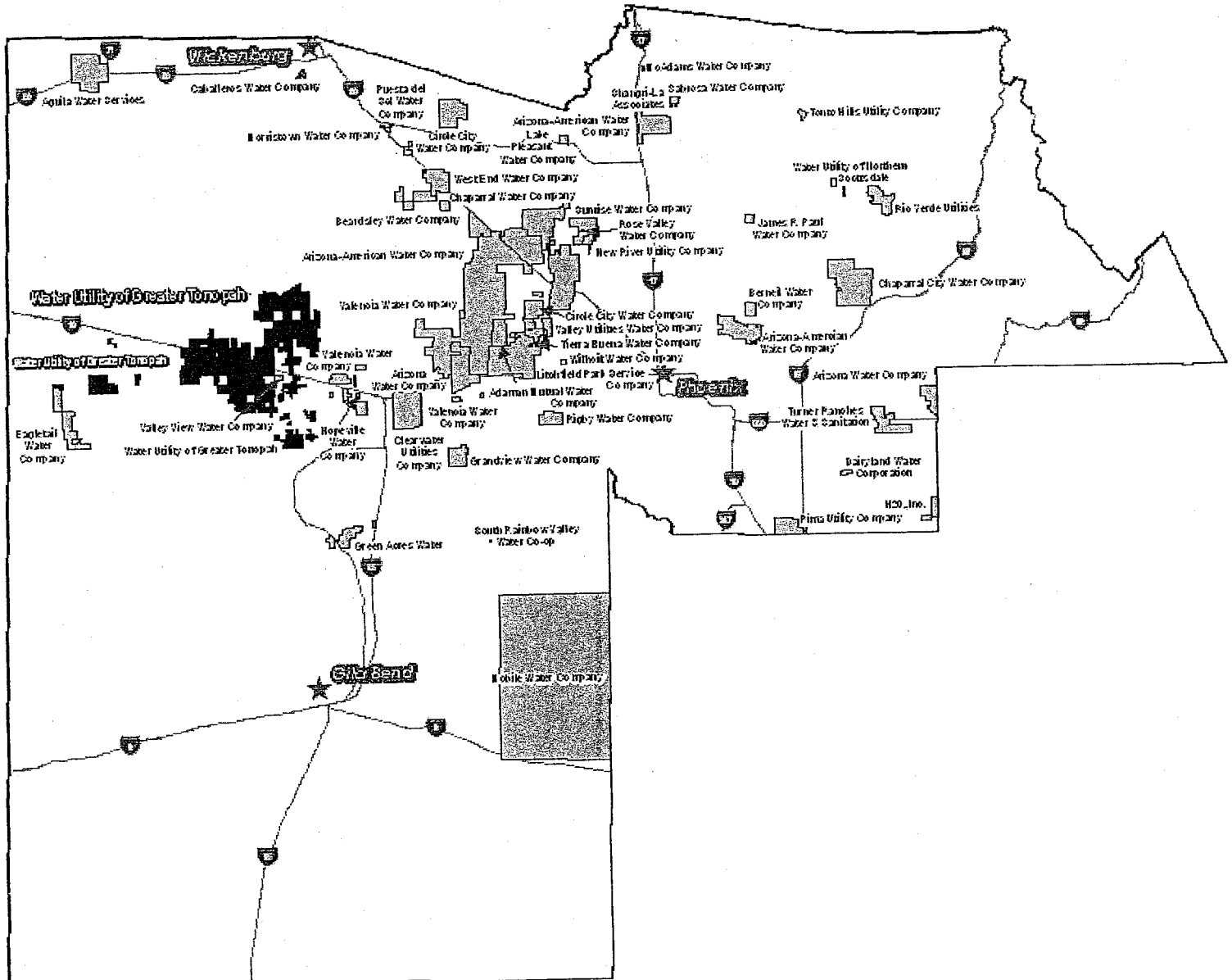


Figure 1: Maricopa County Map

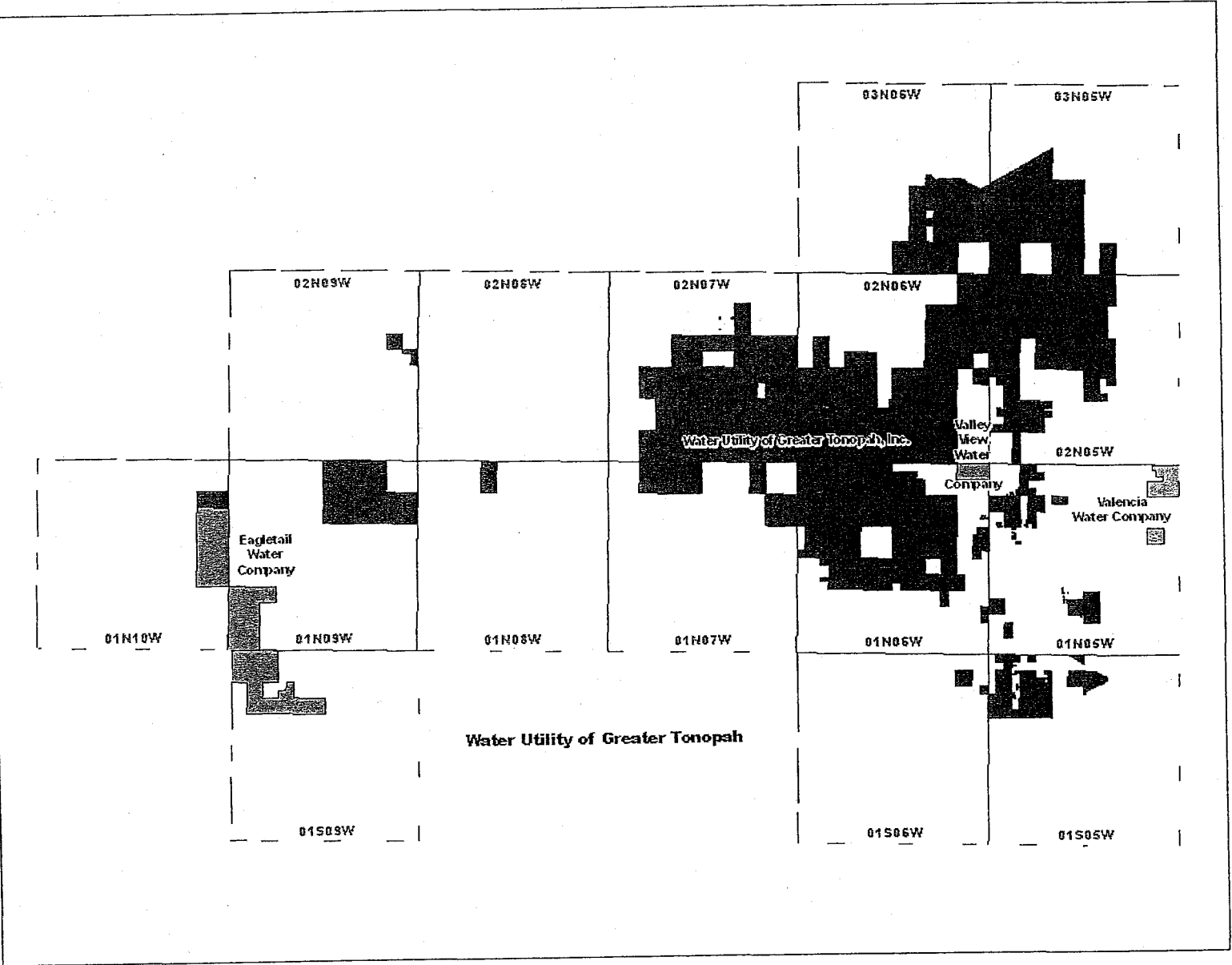


Figure 2: Certificated Areas

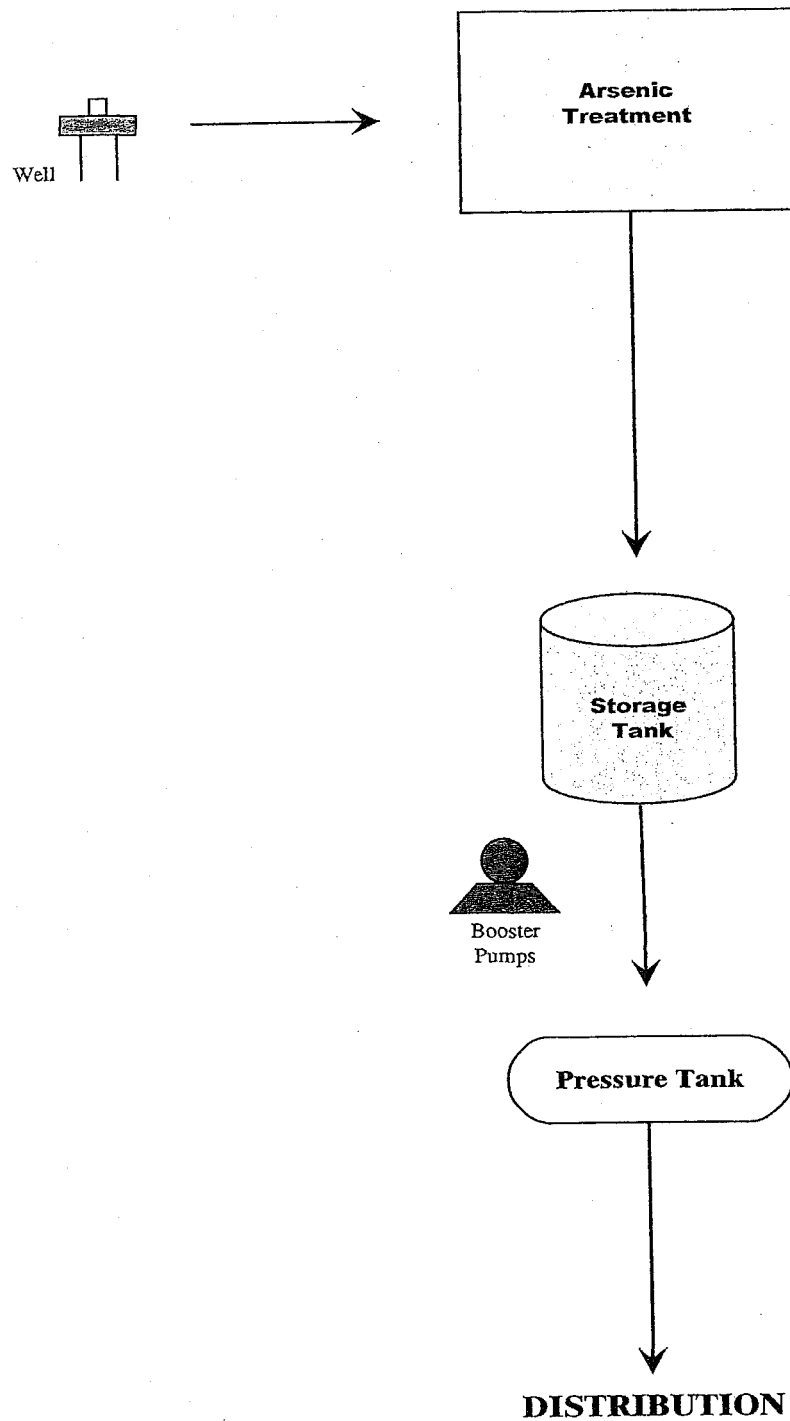


Figure 3: General System Schematic

EXHIBIT JW-3

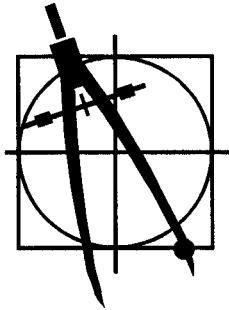
ENGINEERING REPORT FOR

VALENCIA WATER COMPANY, INC.,

DOCKET NO. W-01212A-09-0082 (RATES)

JIAN W LIU

OCTOBER 13, 2009



**Engineering Report for:
Valencia Water Company, Inc. for a Rate
Increase
Docket No. W-01212A-09-0082 (Rates)**

**By: Jian W Liu
Utilities Engineer**

October 13, 2009

EXECUTIVE SUMMARY

CONCLUSIONS:

1. ADEQ or its formally delegated agent, the Maricopa County Environmental Services Department ("MCESD"), reported that the Valencia-Town drinking water system (PWS Number 07-078) is in compliance with regulatory agency requirements and is currently delivering water that meets State and Federal drinking water quality standards required by the Arizona Administrative Code, Title 18, Chapter 4.
2. Valencia-Town is located in the Phoenix Active Management Area ("AMA") and is subject to its AMA reporting and conservation requirements. Staff received an ADWR compliance status report in May 2009. ADWR reported that Valencia-Town is currently in compliance with departmental requirements governing water providers and/or community water systems.
3. Staff concludes that the Valencia-Town drinking water system has adequate production capacity and storage capacity to serve the existing customer base and reasonable growth rate.
4. The Company has an approved Curtailment Plan Tariff on file with the Commission.
5. The Company has a Backflow Prevention Tariff on file with the Commission.
6. A check with the Utilities Division Compliance Section showed no delinquent compliance items for Valencia-Town.

RECOMMENDATIONS

1. Staff recommends that the Company use Staff's depreciation rates by individual National Association of Regulatory Utility Commissioners category as delineated in Table B of Exhibit JWL-3.
2. Staff recommends the annual water testing expense of \$33,729 reported by the Company be used for purposes of this application.
3. Staff recommends that the charges listed under "Staff's Recommendation" in Table C be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

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FIGURES

County Map.....	FIGURE 1
Certificated Area.....	FIGURE 2
Process Schematic.....	FIGURE 3

A. LOCATION OF COMPANY

Valencia Water Company - Town Division ("Valencia-Town" or "Company") is located approximately 40 miles west of downtown Phoenix in Maricopa County with a certificated area covering approximately 7,500 acres. Figure 1 shows the location of Valencia-Town within Maricopa County and Figure 2 shows the certificated area.

B. DESCRIPTION OF THE WATER SYSTEM

The plant facilities were visited on Aug 3rd and 4th, 2009, by Jian Liu, Staff Utilities Engineer, in the accompaniment of Ron Fleming, and James Taylor of the Company.

The facility consists of 9 active wells with total pumping capacity of over 4,100 gallon per minute ("GPM"), 6 arsenic treatment systems ("ATS"), 16 storage tanks with total storage capacity of 4,530,000 gallons, hydro-pneumatic systems and a distribution system serving approximately 5,400 connections. Figure 3 provides a process schematic for the water system. Staff concludes that the Valencia-Town has adequate production capacity and storage capacity to serve the existing customer base and reasonable growth.

(Tabular Description of Water System)

Well Data (active wells only)

ADWR ID No.	Pump HP	Pump GPM	Casing Depth(ft)	Casing Size(in)	Meter Size(in)	Year Drilled
55- 201740 Sonoran Vista NE	150	700	645	11	6	2004
55- 202399 Riata Well #2	125	525	660	11	8	2004
55- 202400 Bales School Well	50	750	550	11	4	2004
55- 207806 4th & Central	25	410	820	10 3/4	6	2006
55- 577508 4th & Baseline Large Well #2	60	600	620	8	6	2000
55- 592220 Blue Hills Deep Well #2	60	350	580	11	6	2002
55- 595258 Sonoran Vista SW	100	500	750	11	6	2003
55- 599204 Blue Hills Shallow Well #1	20	110	320	8 3/4	4	2003
55- 599950 7th & Alarcon Large Well #2	50	250	800	10	4	2004

Note: GPM = gallons per minute.

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
25,000	2	100	1	5	2
50,000	3	119	2	15	8
100,000	2	3,000	1	20	3
180,000	1	5,000	5	25	8
195,000	1	6,000	1	30	3
215,000	1			40	6
240,000	1			50	4
500,000	2			60	2
650,000	1			100	2
750,000	1			150	2
900,000	1				
Total 4,530,000					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
1	79	5/8x3/4	5076	718
2	2,068	3/4	103	
3	1,415	1	115	
4	24,461	1.5	14	
6	56,183	2	107	
8	332,881	3	1	
10	7,010	6	4	
12	76,314	Construction Meters	14	
16	50,019			
18	8,026			
Unknown	1,754	Total	5,434	

C. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY COMPLIANCE ("ADEQ")

ADEQ or its formally delegated agent, the Maricopa County Environmental Services Department ("MCESD"), reported that the Valencia-Town drinking water system (PWS Number 07-078) is in compliance with regulatory agency requirements and is currently delivering water that meets State and Federal drinking water quality standards required by the Arizona Administrative Code, Title 18, Chapter 4. (MCESD report dated 5/5/09)

D. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check with the Utilities Division Compliance Section showed no delinquent compliance items for Valencia-Town. (ACC Compliance Section Email dated 8/5/09)

E. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

Valencia-Town is located in the Phoenix Active Management Area ("AMA") and is subject to its AMA reporting and conservation requirements. Staff received an ADWR compliance status report in May 2009. ADWR reported that Valencia-Town is currently in compliance with departmental requirements governing water providers and/or community water systems.

F. WATER TESTING EXPENSES

Since Valencia-Town drinking water system serves more than 5,000 customers, the Company does not participate in the Monitoring Assistance Program. The Company reported its total water testing expense as \$33,729.06 during the test year, and provided those expenses in tabular form as follows. Staff reviewed this reported amount and supporting documentation. Staff recommends the annual water testing expense of \$33,729 reported by the Company be used for purposes of this application.

Table 1 Water Testing Cost

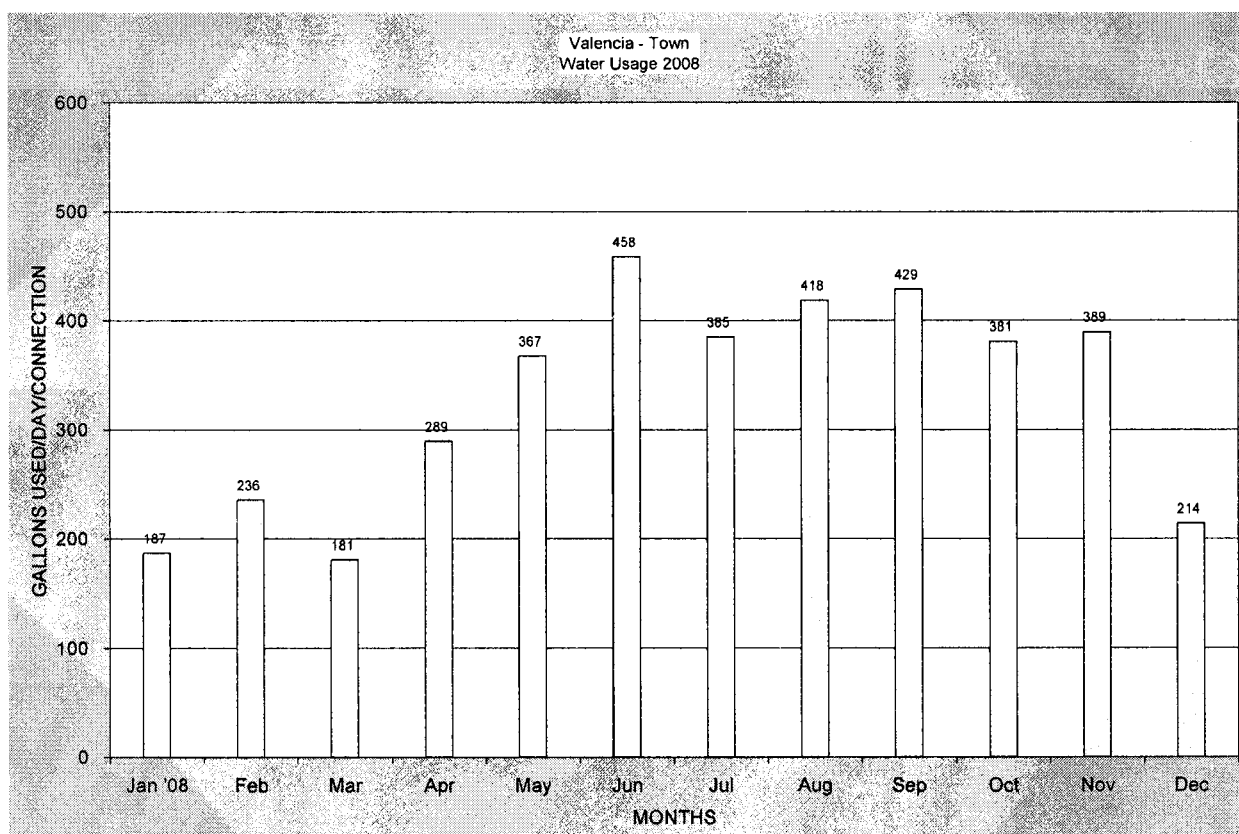
Valencia, Town Division - 2008 Testing Expense

Description	Total
Legend Technical Services	29,651.56
GW Lab Services	2,752.90
TestAmerica Laboratories, Inc	873.48
Statewide Disinfection Service	300.00
Metering Services, Inc	90.00
Mountain States Pipe and Supply	55.00
WVR Supplies for testing	6.12
Grand Total	33,729.06

G. WATER USE

Water Sold

Based on the information provided by the Company, water use for the year 2008 is presented below. The high monthly domestic water use was 458 gal/day per service connection in June and the low monthly domestic water use was 181 gal/day per service connection in March. The average annual use was 328 gal/day per service connection.



Non-account Water

Non-account water should be 10% or less and never more than 15%. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, theft, and flushing. The Company reported 691,866,000 gallons pumped and 635,251,000 gallons sold, resulting in a water loss of 8.18% for 2008. Non-account water is within acceptable limits.

H. GROWTH

In July 2009, the Company had 5,019 active customers and 509 vacant units within its certificated service area. The Company estimates that the customer base will grow at approximately 2% per year for the next 5 years. Using the Company's estimate of projected growth the Company will be serving 6,197 customers in 2013.

I. DEPRECIATION RATES

Staff recommends that the Company use Staff's depreciation rates by individual NARUC category on a going forward bases. Individual depreciation rates by NARUC category are presented in Table B.

Table B. Depreciation Rates

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00

342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	----	----

NOTES:

1. These depreciation rates represent average expected rates. Water companies may experience different rates due to variations in construction, environment, or the physical and chemical characteristics of the water.
2. Acct. 348, Other Tangible Plant may vary from 5% to 50%. The depreciation rate would be set in accordance with the specific capital items in this account.

J. CURTAILMENT PLAN AND BACKFLOW PREVENTION TARIFFS

The Company has approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.

K. METER AND SERVICE LINE INSTALLATION CHARGES

The Company requested permission to change its service line and meter installation charges. These charges are refundable advances and the Company's proposed charges are within Staff's recommended range for these charges. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, separate service line and meter charges have been developed by Staff. Staff recommends that the charges listed under "Staff's Recommendation" in Table C be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

Table C. Service Line and Meter Installation Charges

Meter Size	Current Charges	Proposed Charges	Staff recommended Service Line Charges	Staff ⁽¹⁾ recommended *Meter Charges	Staff ⁽²⁾ recommended Total Charges
5/8 x3/4-inch	360	\$600	\$445	\$155	\$600
3/4-inch	360	\$700	\$445	\$255	\$700
1-inch	400	\$810	\$495	\$315	\$810
1-1/2-inch	630	\$1075	\$550	\$525	\$1075
2-inch Turbine	880	\$1,875	\$830	\$1045	\$1,875
2-inch Compound	880	\$2,720	\$830	\$1,890	\$2,720
3-inch Turbine	1,040	\$2,715	\$1045	\$1,670	\$2,715
3-inch Compound	1,040	\$3,710	\$1165	\$2,545	\$3,710
4-inch Turbine	2,890	\$4,160	\$1,490	\$2,670	\$4,160
4-inch Compound	2,890	\$5,315	\$1,670	\$3,645	\$5,315
6-inch Turbine	4,020	\$7,235	\$2,210	\$5,025	\$7,235
6-inch Compound	4,020	\$9,250	\$2,330	\$6,920	\$9,250
8-inch & Larger	N/A	At Cost	At Cost	At Cost	At Cost

(1). Meter charge includes meter box or vault.

(2). Costs for boring under highway or pavement are additional, at cost.

MARICOPA COUNTY

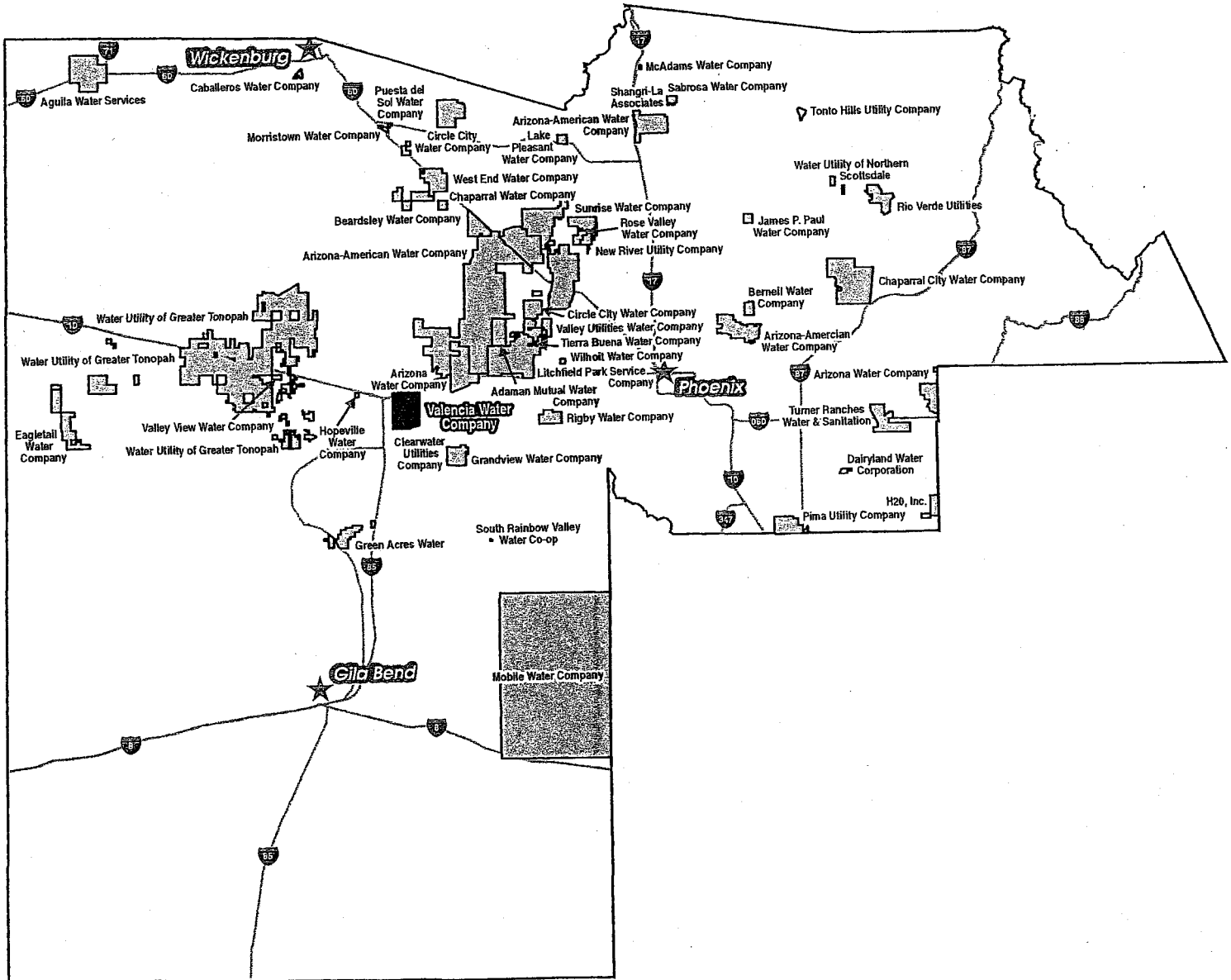


Figure 1: County Map

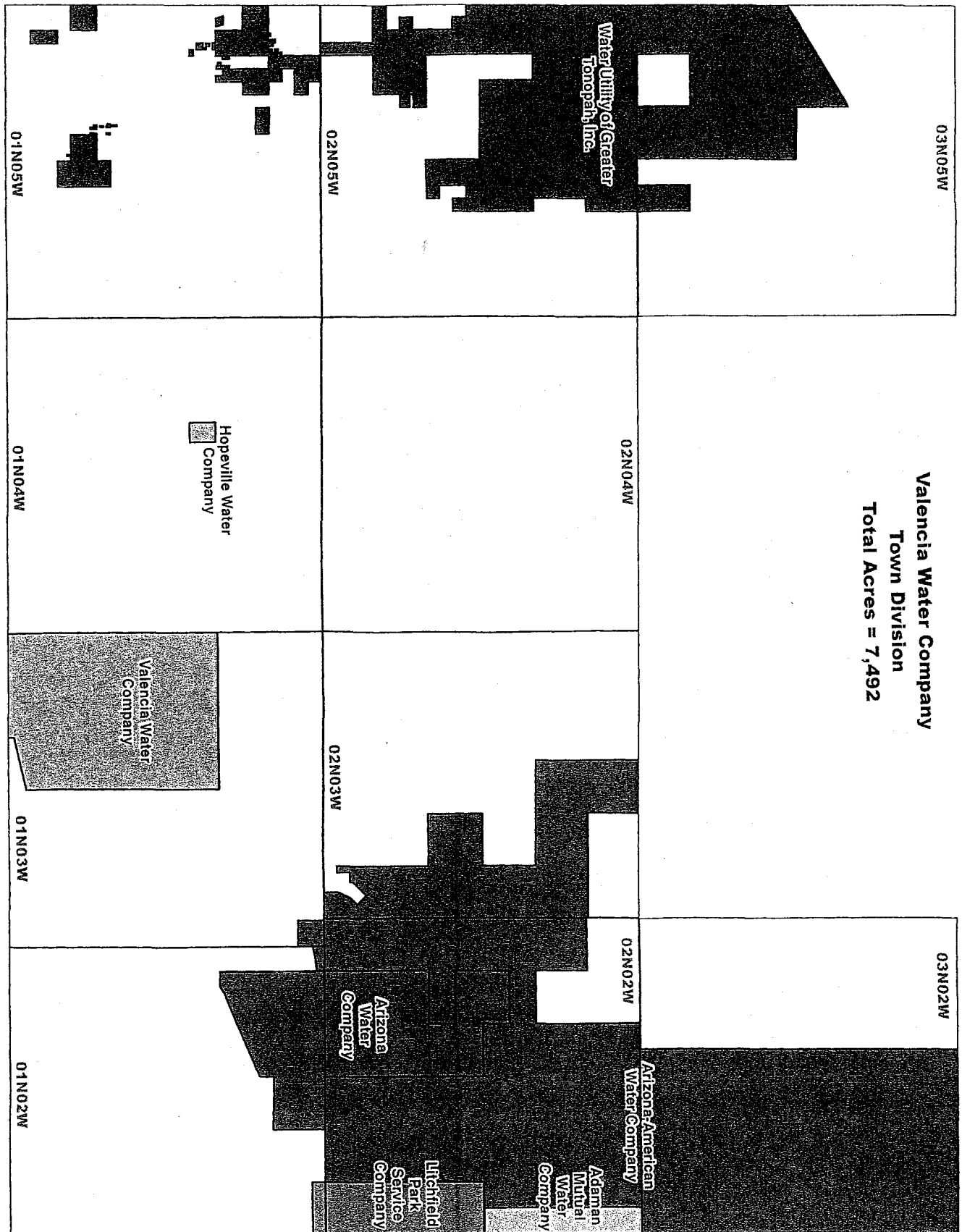


Figure 2: Certificated Area

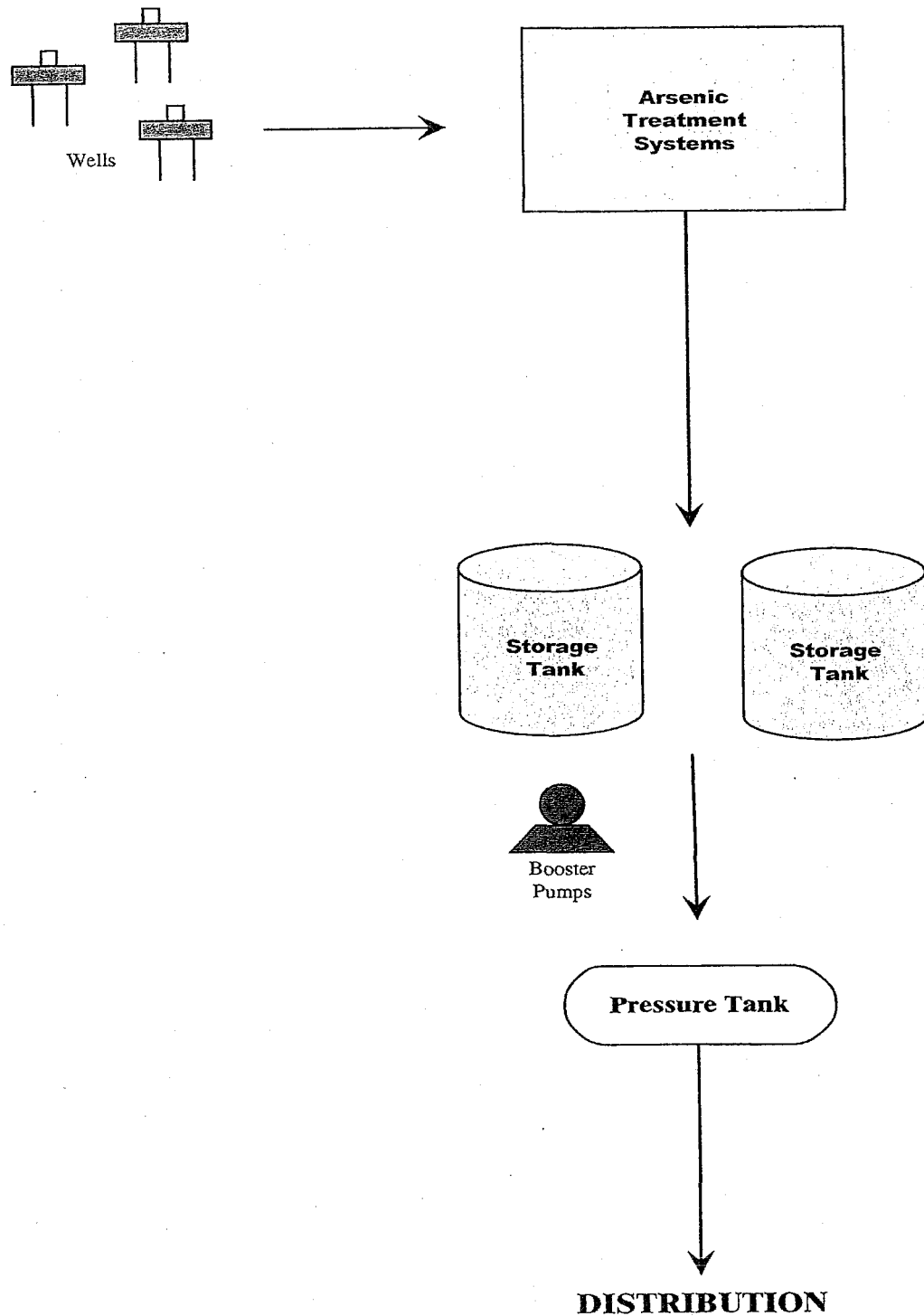


Figure 3: General System Schematic

EXHIBIT JW-4

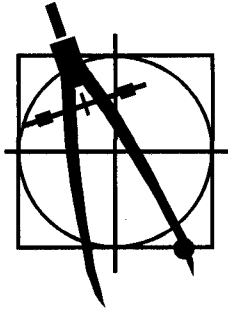
ENGINEERING REPORT FOR

SANTA CRUZ WATER COMPANY

DOCKET NO. W-20446A-09-0080 (RATES)

JIAN W LIU

OCTOBER 13, 2009



**Engineering Report for:
Santa Cruz Water Company for a Rate
Increase
Docket No. W-20446A-09-0080 (Rates)**

**By: Jian W Liu
Utilities Engineer**

October 13, 2009

EXECUTIVE SUMMARY

CONCLUSIONS:

1. ADEQ regulates the Company's Water System under ADEQ Public Water System ("PWS") #11-131. Based on compliance information submitted by the Company, the system has no deficiencies and ADEQ has determined that the system is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, and Chapter 4. (ADEQ reports dated 12/9/08).
2. Santa Cruz Water Company ("Santa Cruz" or "Company") is located in the Pinal Active Management Area ("AMA") and is subject to its AMA reporting and conservation requirements. Staff received an ADWR compliance status report in April 2009. ADWR reported that Santa Cruz is currently in compliance with departmental requirements governing water providers and/or community water systems.
3. Staff concludes that the Santa Cruz has adequate production capacity and storage capacity to serve the existing customer base and reasonable growth.
4. A check with the Utilities Division Compliance Section showed no delinquent compliance items for Santa Cruz.
5. Staff inspected Santa Cruz's Southwest Water Treatment and Distribution Plant (Terrazzo). This Plant was not in service and therefore not used and useful during Staff's field inspection.
6. Santa Cruz has approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.

RECOMMENDATIONS

1. Staff recommends that the Company use Staff's depreciation rates by individual National Association of Regulatory Utility Commissioners category as delineated in Table B of Exhibit JWL-4.
2. Staff recommends the annual water testing expense of \$36,113 reported by the Company be used for purposes of this application.
3. Staff recommends that the charges listed under "Staff's Recommendation" in Table C be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

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FIGURES

County Map.....	FIGURE 1
Certificated Area	FIGURE 2

A. LOCATION OF COMPANY

Global Water - Santa Cruz Water Company ("Santa Cruz" or "Company") is an Arizona public service corporation authorized to provide water service within portions of Pinal County, Arizona. Santa Cruz provided water service to 15,196 customers as of July 31, 2009. Figure 1 shows the location of Santa Cruz within Pinal County and Figure 2 shows the certificated area.

B. DESCRIPTION OF THE WATER SYSTEM

The plant facilities were visited on Aug 18th and 19th, 2009, by Jian Liu, Staff Utilities Engineer, in the accompaniment of Ed Borromeo, and Scott Thomas of the Company.

The facility consists of 5 active wells with total pumping capacity of over 9,800 gallon per minute ("GPM") for potable water use, 5 active wells with total pumping capacity of over 6,300 GPM for construction, golf course, irrigation, and lake water use purposes only, 5 storage tanks with total storage capacity of 6,500,000 gallons, hydro-pneumatic systems and a distribution system serving approximately 15,000 connections. Figure 3 provides a process schematic for the water system. Staff concludes that the Santa Cruz has adequate production capacity and storage capacity to serve the existing customer base and reasonable growth.

Staff inspected Santa Cruz's Southwest Water Treatment and Distribution Plant (Terrazzo). This Plant was not in service and therefore not used and useful during Staff's field inspection.

(Tabular Description of Water System)

Well Data (active wells only)

ADWR ID No.	Pump HP	Pump GPM	Casing Depth(ft)	Casing Size(in)	Meter Size(in)	Year Drilled
55- 612737 Smith	100	1070	1000	20	8	1972
55- 617336 Vance	250	1965	800	20	10	1973
55- 621407 Neely West	350	1980	700	12	10	1955
55- 621406 Neely North	400	2000	1000	12	10	1955
55- 509941 Rancho Mirage	400	2800	1100	16	N/A	1985
55- 621410 Porter *	100	1000	400	20	10	1955
55- 801069 Cobblestone *	200	1280	600	12	10	1957
55- 624037 Glennwilde *	200	1650	1992	18	N/A	1965
55- 622132 Maricopa Meadows *	UNK	600	600	20	4	1976
55- 612247 Amarillo Creek East *	300	1800	1000	18	10	1973

Note: GPM = gallons per minute.

* for construction, golf course, irrigation, and lake water use purposes only

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
500,000	2	5,000	4	18	2
1,500,000	2	10,000	1	25	1
2,500,000	1			40	4
				50	5
				75	6
				150	6
Total 6,500,000				200	1

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
2	518			
6	37,820	5/8x3/4	1825	2,228
8	914,878	3/4	14452	
10	1,540	1	167	
12	183,414	1.5	51	
16	182,991	2	152	
20	23,583	3	3	
24	14,640	4	3	
30	6771			
		Total	16,653	

C. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY COMPLIANCE ("ADEQ")

ADEQ regulates the Company's Water System under ADEQ Public Water System ("PWS") #11-131. Based on compliance information submitted by the Company, the system has no deficiencies and ADEQ has determined that the system is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, and Chapter 4. (ADEQ report dated 12/9/08).

D. ARIZONA CORPORATION COMMISSION (“ACC”) COMPLIANCE

A check with the Utilities Division Compliance Section showed no delinquent compliance items for the Company.

E. ARIZONA DEPARTMENT OF WATER RESOURCES (“ADWR”) COMPLIANCE

Santa Cruz is located in the Pinal Active Management Area (“AMA”) and is subject to its AMA reporting and conservation requirements. Staff received an ADWR compliance status report in April 2009. ADWR reported that Santa Cruz is currently in compliance with departmental requirements governing water providers and/or community water systems.

F. WATER TESTING EXPENSES

The Company reported its total water testing expense as \$36,113.26 during the test year, and provided those expenses in tabular form as follows. Staff reviewed this reported amount and supporting documentation provided by the Company. Staff recommends the annual water testing expense of \$36,113 reported by the Company be used for purposes of this application.

Table A. Water Testing Cost

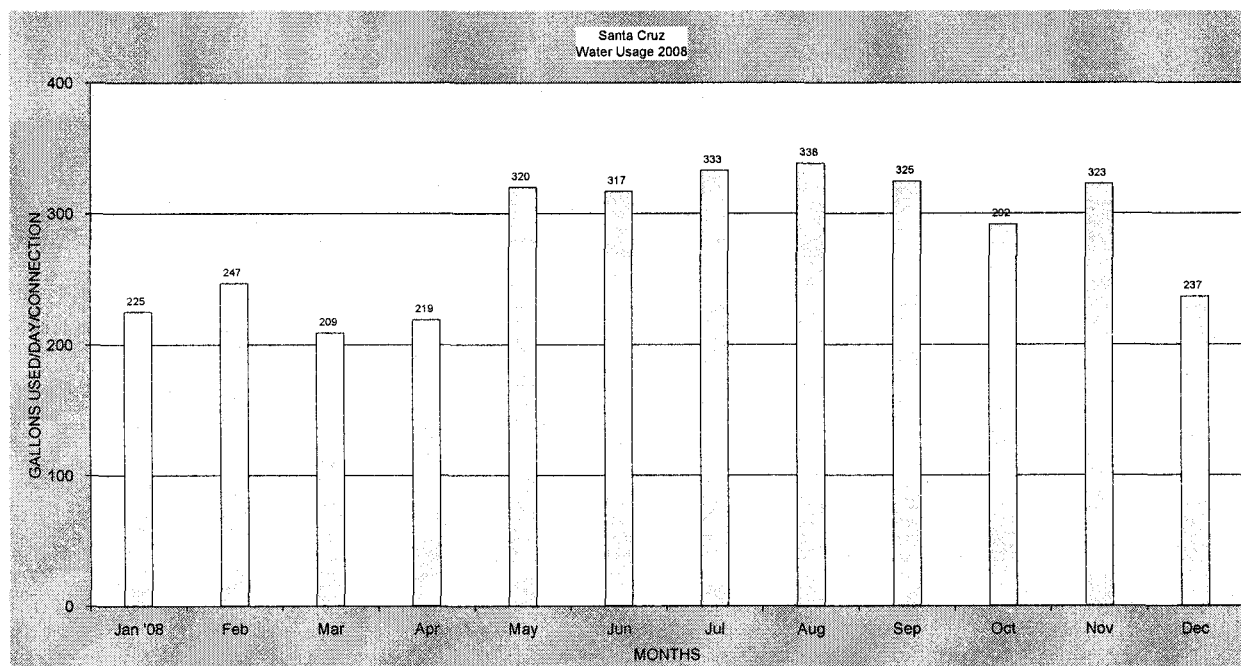
Santa Cruz Water Company - 2008 Testing Expense

Description	Total
GW Lab Services	19937.76
TestAmerica Laboratories, Inc	15613.23
RCI Systems, Inc	195
Legend Tech	163.5
Mountain States Pipe and Supply	126.47
MCGR Ship4Water Samples	77.3
Grand Total	36,113.26

G. WATER USE

Water Sold

Based on the information provided by the Company, water use for the year 2008 is presented below. The high monthly domestic water use was 338 gal/day per service connection in August and the low monthly domestic water use was 209 gal/day per service connection in March. The average annual use was 282 gal/day per service connection.



Non-account Water

Non-account water should be 10% or less and never more than 15%. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, theft, and flushing. The Company reported 1,749,993,000 gallons pumped and 1,688,656,000 gallons sold, resulting in a water loss of 3.50% for 2008¹. Non-account water is within acceptable limits.

¹ The Company reported approximately 644 million gallons of groundwater used for construction, golf course, irrigation, and lakes.

H. GROWTH

In December 2003, Santa Cruz had 1,772 customers. In December 2007, Santa Cruz's customer base was 15,717 customers. In July 2009, the Company had 15,196 active customers, 1,714 vacant units. In this changing economic climate it is hard for Staff to predict what level of growth is reasonable. The Company estimates a much lower growth rate in the Maricopa area, as a result of the economic down-turn in the economy the customer base is expected to grow at approximately 2 percent per year for 2009, 2010, and 2011. Using the Company's estimate of projected growth the Company will be serving 17,875 customers in 2011.

I. DEPRECIATION RATES

Staff recommends that Santa Cruz use Staff's depreciation rates by individual National Association of Regulatory Utility Commissioners category as delineated in Table B of Exhibit JWL-4.

Table B. Depreciation Rates

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	----	----

NOTES:

1. These depreciation rates represent average expected rates. Water companies may experience different rates due to variations in construction, environment, or the physical and chemical characteristics of the water.
2. Acct. 348, Other Tangible Plant may vary from 5% to 50%. The depreciation rate would be set in accordance with the specific capital items in this account.

J. CURTAILMENT PLAN AND BACKFLOW PREVENTION TARIFF

Santa Cruz has approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.

K. METER AND SERVICE LINE INSTALLATION CHARGES

The Company requested permission to change its service line and meter installation charges. These charges are refundable advances and the Company's proposed charges are within Staff's recommended range for these charges. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, separate service line and meter charges have been developed by Staff. Staff recommends that the charges listed under "Staff's Recommendation" in Table C be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

Table C. Service Line and Meter Installation Charges

Meter Size	Current Charges	Proposed Charges	Staff recommended Service Line Charges	Staff ⁽¹⁾ recommended Meter Charges	Staff ⁽²⁾ recommended Total Charges
5/8 x 3/4-inch	400	\$600	\$445	\$155	\$600
3/4-inch	440	\$700	\$445	\$255	\$700
1-inch	500	\$810	\$495	\$315	\$810
1-1/2-inch	715	\$1075	\$550	\$525	\$1075
2-inch Turbine	1,170	\$1,875	\$830	\$1045	\$1,875
2-inch Compound	1,700	\$2,720	\$830	\$1,890	\$2,720
3-inch Turbine	1,585	\$2,715	\$1045	\$1,670	\$2,715
3-inch Compound	2,190	\$3,710	\$1165	\$2,545	\$3,710
4-inch Turbine	2,540	\$4,160	\$1,490	\$2,670	\$4,160
4-inch Compound	3,215	\$5,315	\$1,670	\$3,645	\$5,315
6-inch Turbine	4,815	\$7,235	\$2,210	\$5,025	\$7,235
6-inch Compound	6,270	\$9,250	\$2,330	\$6,920	\$9,250
8-inch & Larger	N/A	At Cost	At Cost	At Cost	At Cost

(1). Meter charge includes meter box or vault.

(2). Costs for boring under highway or pavement are additional, at actual cost.

PINAL COUNTY

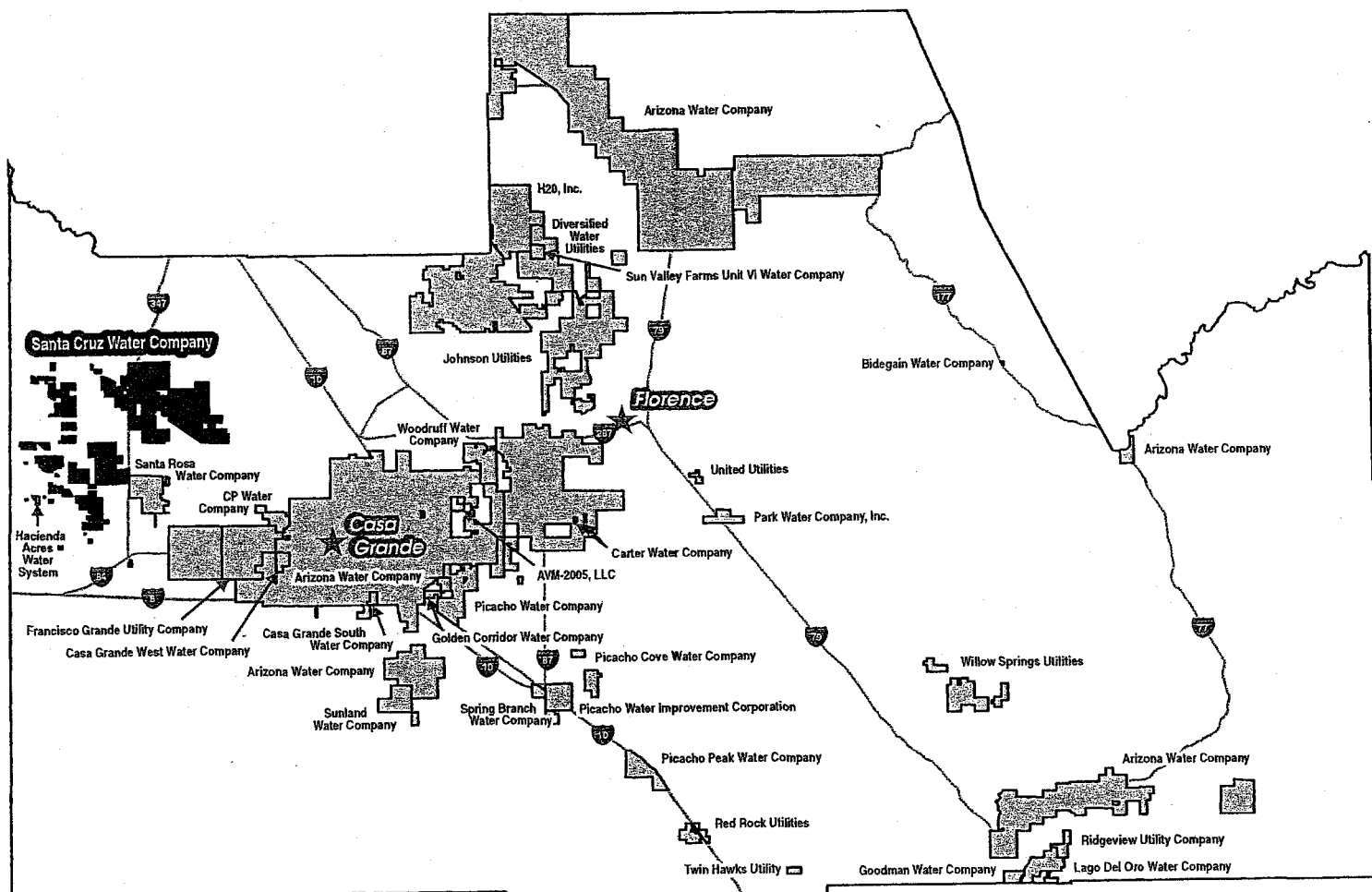


Figure 1: County Map

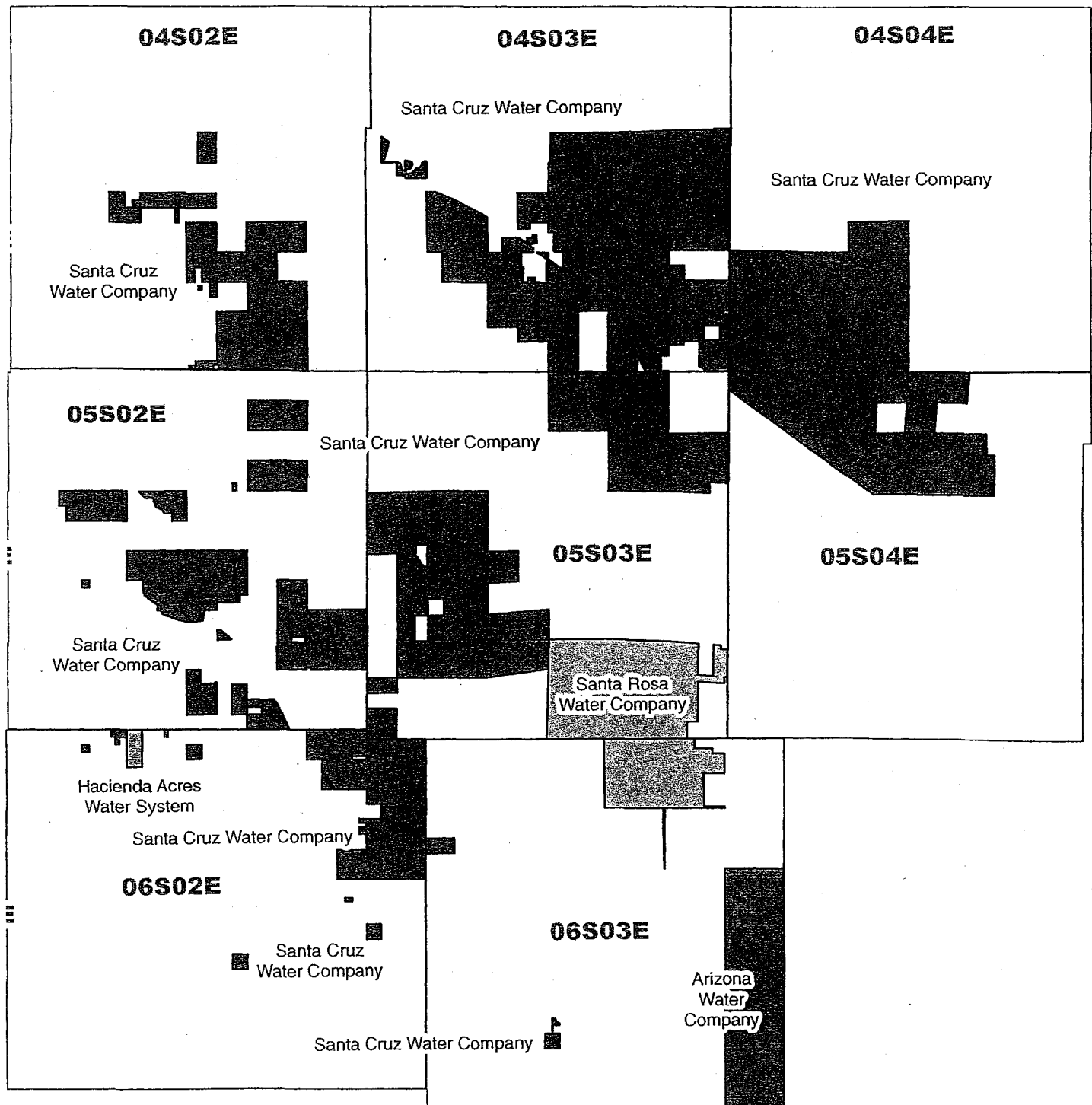


Figure 2: Certificated Area

EXHIBIT JW-5

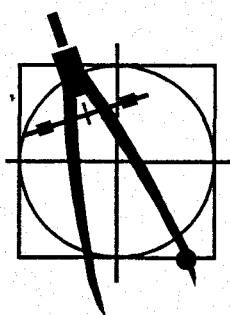
ENGINEERING REPORT FOR

WILLOW VALLEY WATER CO., INC.

DOCKET NO. W-01732A-09-0079 (RATES)

JIAN W LIU

OCTOBER 13, 2009



Engineering Report for WILLOW VALLEY WATER CO., INC.

Docket No. W-01732A-09-0079 (Rates)

By: **Jian Liu**
Utilities Engineer

October 13, 2009

CONCLUSIONS

1. ADEQ regulates the Company's Water Systems under ADEQ Public Water System ("PWS") #08-040 and #08-129. Based on compliance information submitted by the Company, the systems have no deficiencies and ADEQ has determined that these systems are currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, and Chapter 4. (ADEQ reports dated 2/13/09).
2. The Company is not located in any Active Management Area ("AMA") and is not subject to any AMA reporting and conservation requirements. Staff received an ADWR compliance status report on April 30, 2009, ADWR reported that it has determined that Willow Valley is currently in compliance with departmental requirements governing water providers and/or community water systems.
3. A check with the Utilities Division Compliance Section showed no delinquent compliance items for Willow Valley. (ACC Compliance Section Email dated 9/11/09).
4. Willow Valley has approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.
5. King Street, PWS #08-040, and Lake Cimarron, PWS #08-129 reported water loss as:

Water System	Gallons Pumped	Gallons Sold	Water loss (%)
King Street, PWS #08-040	115,312,000	91,995,000	16.8*
Lake Cimarron, PWS #08-129	13,543,000	10,379,000	20.4**

* 3,924,000 gallons of water used for flushing;

** 405,000 gallons of water used for flushing.

RECOMMENDATIONS

1. Staff recommends that within 90 days of a Decision in this matter the Company file with Docket Control, as a compliance item in this docket, a detailed plan demonstrating how the Company will reduce its water loss for King Street, PWS #08-040, and Lake Cimarron, PWS #08-129 to less than 10 percent. If the Company finds that reduction of water loss to less than 10 percent is not cost-effective, the Company should submit, within 90 days of a Decision in this matter, a detailed cost analysis and explanation demonstrating why water loss reduction to less than 10 percent is not cost-effective. In any event water loss shall not exceed 15 percent.
2. Staff recommends the annual water testing expense of \$5,401 reported by the Company be used for purposes of this application.
3. Staff recommends that Willow Valley use the depreciation rates delineated in Table B of Exhibit JWL-5.
4. Staff recommends that the charges listed under "Staff's Recommendation" in Table C be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

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A. LOCATION OF COMPANY

Willow Valley Water Co., Inc. ("Willow Valley" or the "Company") is an Arizona public service corporation authorized to provide water service within portions of Mohave County, Arizona. Willow Valley provided service to 1,528 customers as of July, 2009. Figure 1 shows the location of Willow Valley within Mohave County and Figure 2 shows the certificated area.

B. DESCRIPTION OF THE WATER SYSTEMS

The plant facilities were visited on September 18, 2009, by Jian Liu, Staff Utilities Engineer, in the accompaniment of Ron Fleming, and Curtis Pine of the Company. The Company operates two independent water systems. Arizona Department of Environmental Quality ("ADEQ") regulates the Company's Water Systems under ADEQ Public Water System ("PWS") #08-040 and #08-129. Brief descriptions of the two systems are as follows:

1. King Street, PWS # 08-040: This system consists of three wells (equipped with a 15 horsepower ("Hp") submersible pump for each well, producing a total of 1,100 gallons per minute ("gpm")), three storage tanks (one 47,000 gallon, one 96,000 gallon, and one 163,000 gallon), eight booster pumps, three pressure tanks (one 2,200 gallon, one 5,200 gallon, and one 14,000 gallon), an Iron and Manganese removal systems at Unit 17 and King St., and a distribution system. This system serves approximately 1,400 service connections.
2. Lake Cimarron, PWS #08-129: This system consists of two wells, producing a total of 415 gpm, a 196,000 gallon storage tank, four booster pumps, a 5,800 gallons pressure tank and a distribution system. There is an Iron and Manganese removal system on site. This system serves approximately 120 service connections.

Detailed plant facility listings are as follows:

King Street, PWS #08-040

Well Data (active wells only)

Location/No.	ADWR ID #	Pump Hp	Pump GPM	Casing Size	Casing Depth (Feet)	Meter Size
King Street	55-603947	15	300	8"	120	4"
Unit 17	55-603949	15	300	8"	100	4"
Unit 17	55-206170	15	500	8"	120	6"

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
163,000	1	14,000	1	15	6
47,000	1	5,200	1	30	1
96,000	1	2,200	1	40	1
Total 306,000					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
2	904	5/8x3/4	1,421	47
3	1,587	3/4	11	
4	68,093	1	15	
6	28,368	1.5	2	
8	4,220	2	1	
Unknown	122	4	2	
		6	3	
		Total	1,455	

Lake Cimarron, PWS #08-129

Well Data (active wells only)

Location/No.	ADWR ID #	Pump Hp	Pump GPM	Casing Size	Casing Depth (Feet)	Meter Size
Lake Cimarron Small	55-604161	10	225	6"	100	4"
Lake Cimarron Big	55-604160	7.5	190	12"	60	4"

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
196,000	1	5,800	1	20	2
				25	2
Total 196,000					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
4	297	5/8x3/4	128	19
6	880	2	1	
8	11,866			
10	6,161	Total	129	

C. WATER USE

Water Sold

Based on the information provided by the Company on its Water Use Data Sheets, water use for the year 2008 is presented below for each system.

Water Use, gallons per day ("GPD") per connection

System	High/Mo.	Low/Mo.	Average
King Street, PWS #08-040	270 in Aug.	96 in Jan.	173
Lake Cimarron, PWS #08-129	334 in Sept.	128 in Dec.	210

Non-Account Water

For each water system, the Company reported the following gallons pumped and gallons sold in 2008, which Staff used to determine the water loss per system:

Water Loss

Water System	Gallons Pumped	Gallons Sold	Water loss (%)
King Street, PWS #08-040	115,312,000	91,995,000	16.8*
Lake Cimarron, PWS #08-129	13,543,000	10,379,000	20.4**

* 3,924,000 gallons of water used for flushing;

** 405,000 gallons of water used for flushing.

Non-account water should be 10 percent or less and never more than 15 percent. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, theft, and flushing. Staff recommends that within 90 days of a Decision in this matter the Company file with Docket Control, as a compliance item in this docket, a detailed plan demonstrating how the Company will reduce its water loss for King Street, PWS #08-040, and Lake Cimarron, PWS #08-129 to less than 10 percent. If the Company finds that reduction of water loss to less than 10 percent is not cost-effective, the Company should submit, within 90 days of a Decision in this matter, a detailed cost analysis and explanation for each system demonstrating why water loss reduction to less than 10 percent is not cost-effective. In any event water loss shall not exceed 15 percent.

D. GROWTH

In July 2009, the Company had 1,528 active customers, 66 vacant units. The Company estimates that the customer base will grow at approximately 1 percent per year for next 5 years. Using the Company's estimate of projected growth the Company will be serving 1,660 customers in 2013.

Staff concludes that the Willow Valley has adequate production capacity and storage capacity to serve the existing customer base and reasonable growth.

E. ADEQ COMPLIANCE

Compliance

Based on compliance information submitted by the Company, the systems have no deficiencies and ADEQ has determined that these systems are currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, and Chapter 4. (ADEQ reports dated 2/13/09).

Water Testing Expense

The Company reported its total water testing expense as \$5,400.59 during the test year, and provided those expenses in tabular form as follows. Staff reviewed this reported amount and supporting documentation provided by the Company. Staff recommends the annual water testing expense of \$5,401 (rounded) reported by the Company be used for purposes of this application.

Table A. Water Testing Cost

Willow Valley - 2008 Testing Expense

Description	Total
Legend Technical Services	2,042.00
FedEx	1,276.45
GW Lab Services	1,275.00
Mohave Environmental Laborator	760.00
WVWC Portion Invoice #2-614-62	47.14
TestAmerica Laboratories, Inc	-
Grand Total	5,400.59

F. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

The Company is not located in any Active Management Area ("AMA") and is not subject to any AMA reporting and conservation requirements. Staff received an ADWR compliance status report on April 30, 2009, ADWR reported that it has determined that Willow Valley is currently in compliance with departmental requirements governing water providers and/or community water systems.

G. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check with the ACC Utilities Division Compliance Section showed no delinquent compliance items for the Company. (ACC Compliance Section Email dated 9/11/09).

H. DEPRECIATION RATES

Staff has developed typical and customary depreciation rates within a range of anticipated equipment life. These rates are presented in Table B. It is recommended that the Company use depreciation rates by individual NARUC category, as delineated in Table B.

Table B. Depreciation Rates

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	3	33.33
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	----	----

NOTES:

- These depreciation rates represent average expected rates. Water companies may experience different rates due to variations in construction, environment, or the physical and chemical characteristics of the water.
- Acct. 348, Other Tangible Plant may vary from 5% to 50%. The depreciation rate would be set in accordance with the specific capital items in this account.

I. OTHER ISSUES

1. Curtailment Plan and Backflow Prevention Tariffs

Willow Valley has approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.

2. Service Line and Meter Installation Charges

The Company requested permission to change its service line and meter installation charges. These charges are refundable advances and the Company's proposed charges are within Staff's recommended range for these charges. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, separate service line and meter charges have been developed by Staff. Staff recommends that the charges listed under "Staff's Recommendation" in Table C be adopted along with the adoption of an installation charge of "At Cost" for meter sizes of 8-inch and larger.

Table C. Service Line and Meter Installation Charges

Meter Size	Current Charges	Proposed Charges	Staff recommended Service Line Charges	Staff ⁽¹⁾ recommended Meter Charges	Staff ⁽²⁾ recommended Total Charges
5/8 x3/4-inch	445	\$600	\$445	\$155	\$600
3/4-inch	515	\$700	\$445	\$255	\$700
1-inch	590	\$810	\$495	\$315	\$810
1-1/2-inch	820	\$1075	\$550	\$525	\$1075
2-inch Turbine	1,380	\$1,875	\$830	\$1045	\$1,875
2-inch Compound	1,380	\$2,720	\$830	\$1,890	\$2,720
3-inch Turbine	1,935	\$2,715	\$1045	\$1,670	\$2,715
3-inch Compound	1,935	\$3,710	\$1165	\$2,545	\$3,710
4-inch Turbine	3,030	\$4,160	\$1,490	\$2,670	\$4,160
4-inch Compound	3,030	\$5,315	\$1,670	\$3,645	\$5,315
6-inch Turbine	5,535	\$7,235	\$2,210	\$5,025	\$7,235
6-inch Compound	5,535	\$9,250	\$2,330	\$6,920	\$9,250
8-inch & Larger	N/A	At Cost	At Cost	At Cost	At Cost

(1). Meter charge includes meter box or vault.

(2). Costs for boring under highway or pavement are additional, at actual cost.

MOHAVE COUNTY

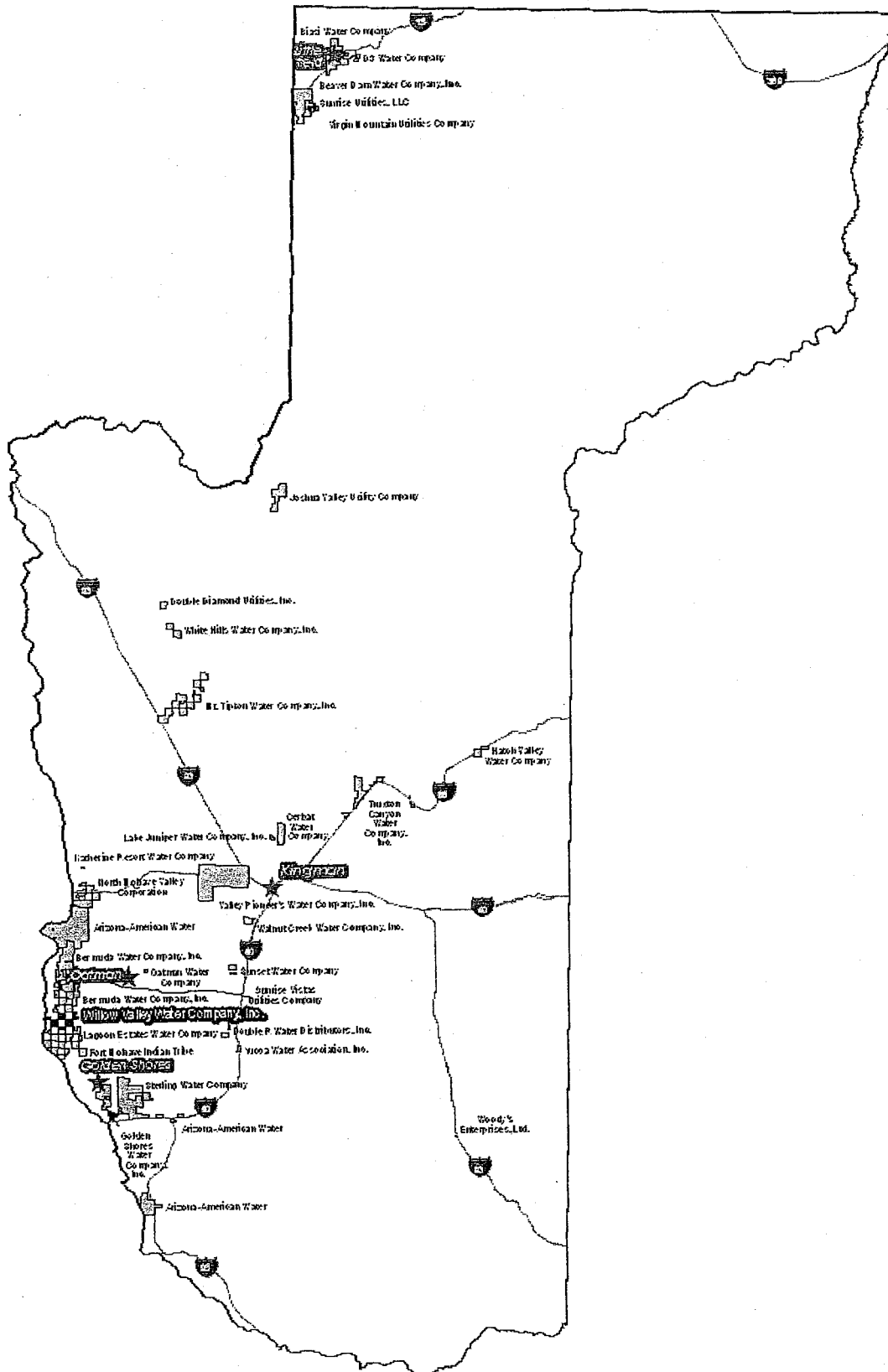


Figure 1: Mohave County Map

MOHAVE COUNTY

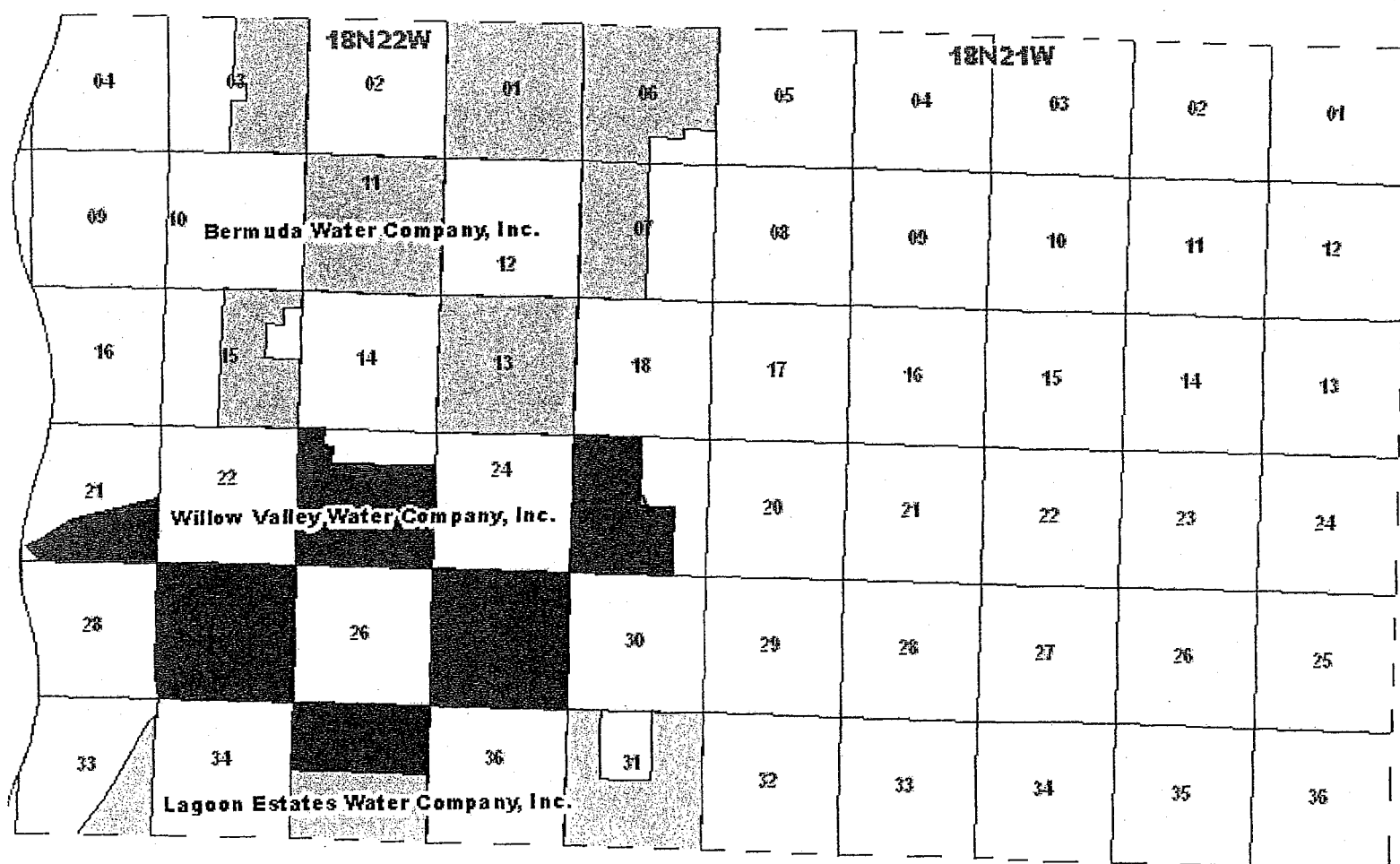


Figure 2: Certificated Area

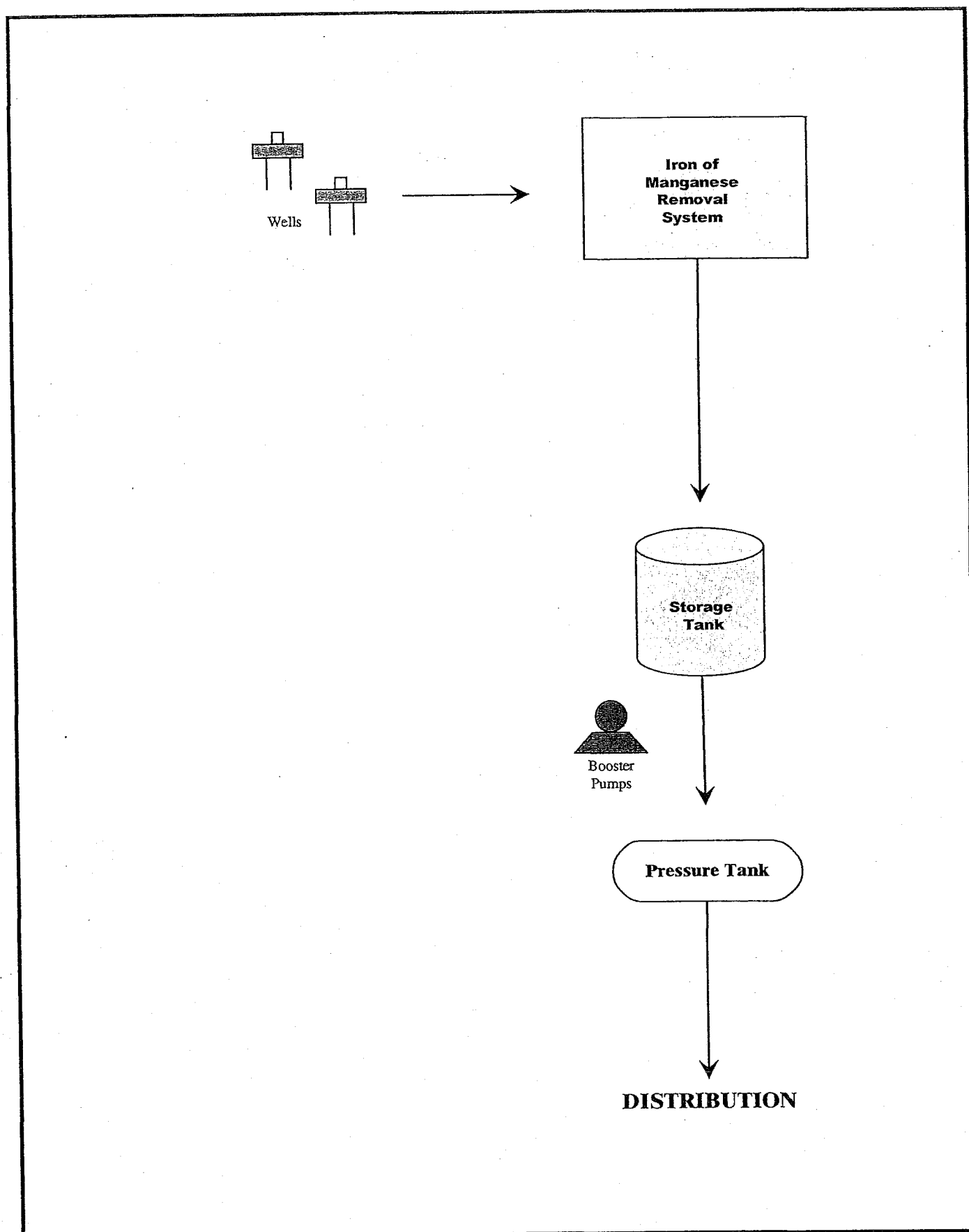


Figure 3: General System Schematic

EXHIBIT JWL-6

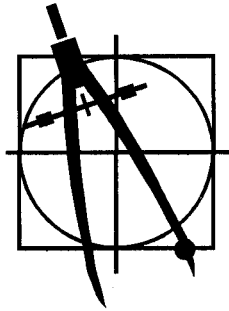
ENGINEERING REPORT FOR

GLOBAL WATER-PALO VERDE UTILITIES COMPANY

DOCKET NO. SW-20445A-09-0077 (RATES)

JIAN W LIU

OCTOBER 13, 2009



**Engineering Report
For Global Water-Palo Verde Utilities
Company
Docket No. SW-20445A-09-0077
(Rate Increase Application)**

By Jian W Liu

October 13, 2009

EXECUTIVE SUMMARY

CONCLUSIONS:

1. ADEQ regulates the Palo Verde wastewater treatment plant under Permit No. 34460. Per the January 29, 2009 Compliance Status Reports issued by ADEQ, the system is in full compliance with ADEQ requirements.
2. A check with the Utilities Division Compliance Section showed no delinquent compliance items. (ACC Compliance Section Email dated 9/11/09).
3. Staff inspected Palo Verde's 1.0 MGD SBR treatment facility. This Plant was not in service and therefore not used and useful during Staff's field inspection.
4. Staff inspected Palo Verde's 0.3 MGD facultative lagoon. This facility was not in service and therefore not used and useful during Staff's field inspection

RECOMMENDATIONS:

1. It is recommended that the Company use the depreciation rates presented in Table G-1 by individual NARUC category.
2. Staff recommends the annual testing expense of \$99,923 reported by the Company be used for purposes of this application.

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FIGURES

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A. LOCATION OF COMPANY

Global Water-Palo Verde Utilities Company ("Palo Verde" or "Company") is an Arizona public service corporation authorized to provide wastewater service within portions of Pinal County, Arizona. Palo Verde provided wastewater service to 14,997 customers as of July 31, 2009. Figure 1 shows the location of Palo Verde within Pinal County and Figure 2 shows the certificated area.

B. DESCRIPTION OF THE WASTEWATER SYSTEM

Palo Verde owns and operates an enclosed three million gallon per day ("MGD") sequential batch reactor ("SBR") treatment plant, sand filters, ultra violet disinfection units and an effluent reuse and surface water disposal system to serve approximately 15,000 customers. The plant facilities were visited on Aug 18th and 19th, 2009, by Jian Liu, Staff Utilities Engineer, in the accompaniment of Ed Borromeo, and Scott Thomas of the Company.

Staff inspected Palo Verde's 1.0 MGD SBR treatment facility. This Plant was not in service and therefore not used and useful during Staff's field inspection.

Staff inspected Palo Verde's 0.3 MGD facultative lagoon. This facility was not in service and therefore not used and useful during Staff's field inspection.

Lift Station

Location	Quantity of Pumps	Horsepower per Pump	Capacity per Pump (GPM)	Wet Well Capacity (gals.)
Rancho El Dorado	3	20	1,000	23,095
Reclaimed Water Delivery System	3	50	2,100	93,223
Cobblestone	2	18	1,200	8,900
McDavid	2	70	650	15,000
Maricopa Groves	2	40	750	24,600
Alterra	2	15	690 (no head*)	13,200
Tortosa	2	5	300 (no head)	10,300
PVWR Influent	2	100	5,000	328,000

* no head refers to the flow under open pipe conditions.

Manholes

Type	Quantity
Standard	1497
Drop	35
Discharge	1

Force Mains

Size	Material	Length (Feet)
6-inch	PVC	1,850
8-inch	PVC	520
10-inch	PVC	6,552
14-inch	PVC	2,406

Force Mains - Reclaimed Water Lines

Size	Length (Feet)
8-inch	5,957
10-inch	6,290
12-inch	130
16-inch	6,030
18-inch	32,130
24-inch	32,421

Cleanouts

Quantity
48

Collection Mains

Diameter	Length (Feet)
6-inch	115
8-inch	459,974
10-inch	41,869
12-inch	35,132
14-inch	5,560
15-inch	16,414
16-inch	145
18-inch	8,801
24-inch	27,463
27-inch	1,679
30-inch	23,380
36-inch	17,902
42-inch	11,551
48-inch	4,474

Service Laterals

Diameter	Material	Length (Feet)
4-inch	PVC	16,355
8-inch	PVC	8
	Total:	16,363

Staff concludes that Palo Verde has adequate treatment capacity to serve the existing customer base and reasonable growth.

C. WASTEWATER FLOW

Based on the information provided by the Company, wastewater flow for the year 2008 is presented in Figure 4. Customers experienced a high monthly average wastewater flow of 151 GPD per connection and a low monthly average wastewater flow of 125 GPD per connection for an average annual wastewater flow of 137 GPD per connection.

D. GROWTH

In July 2009, the Company had 14,997 active customers, 1,710 vacant units. The Company estimates that the customer base will grow at approximately 2 percent per year for 2009, 2010, and 2011. Using the Company's estimate of projected growth the Company will be serving 17,676 customers in 2011.

E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

ADEQ regulates the Palo Verde wastewater treatment plant under Permit No. 34460. Per the January 29, 2009 Compliance Status Reports issued by ADEQ, the system is in full compliance with ADEQ requirements.

F. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

A check with the Utilities Division Compliance Section showed no delinquent compliance items. (ACC Compliance Section Email dated 9/11/09).

G. DEPRECIATION RATES

In recent orders, the Commission has been shifting away from the use of composite depreciation rates in favor of individual depreciation rates by National Association of Regulatory Utility Commissioners ("NARUC") category. (For example, a uniform 2.50% composite rate would not really be appropriate for either vehicles or transmission mains and instead, different specific retirement rates should be used.)

Staff has developed typical and customary depreciation rates within a range of anticipated equipment life. These rates are presented in Table G-1 and it is recommended that the Company use these depreciation rates by individual NARUC category.

Table G-1. Wastewater Depreciation Rates

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
354	Structures & Improvements	30	3.33
355	Power Generation Equipment	20	5.00
360	Collection Sewers – Force	50	2.0
361	Collection Sewers- Gravity	50	2.0
362	Special Collecting Structures	50	2.0
363	Services to Customers	50	2.0
364	Flow Measuring Devices	10	10.0
365	Flow Measuring Installations	10	10.00
366	Reuse Services	50	2.00
367	Reuse Meters & Meter Installations	12	8.33
370	Receiving Wells	30	3.33
371	Pumping Equipment	8	12.50
374	Reuse Distribution Reservoirs	40	2.50
375	Reuse Transmission & Distribution System	40	2.50
380	Treatment & Disposal Equipment	20	5.0
381	Plant Sewers	20	5.0
382	Outfall Sewer Lines	30	3.33
389	Other Plant & Miscellaneous Equipment	15	6.67
390	Office Furniture & Equipment	15	6.67
390.1	Computers & Software	5	20.0
391	Transportation Equipment	5	20.0
392	Stores Equipment	25	4.0
393	Tools, Shop & Garage Equipment	20	5.0
394	Laboratory Equipment	10	10.0
395	Power Operated Equipment	20	5.0
396	Communication Equipment	10	10.0
397	Miscellaneous Equipment	10	10.0
398	Other Tangible Plant	----	----

NOTE: Acct. 398, Other Tangible Plant may vary from 5% to 50%. The depreciation rate would be set in accordance with the specific capital items in this account.

H. Palo Verde Utilities Company Testing Expenses

The Company reported a total testing expense of \$99,922.75 during the test year, and provided testing expenses in tabular form as follows. Staff has reviewed the information provided by the Company and recommends the annual testing expense of \$99,923 (rounded) reported by the Company be used for purposes of this application.

Table A. Testing Cost

Palo Verde Utilities Company - 2008 Testing Expense

Description	Total
TestAmerica Laboratories, Inc	49,066.00
GW Lab Services	37,085.15
Aquatic Consulting & Testing I	11,600.00
Edward Hyden	840.00
RCI Systems, Inc.	627.43
Environmental Resource Assoc.	247.46
Metering Services, Inc	222.78
FEDEX	194.89
Cooler and dry ice for samples	39.04
Grand Total	99,922.75

PINAL COUNTY - SEWER

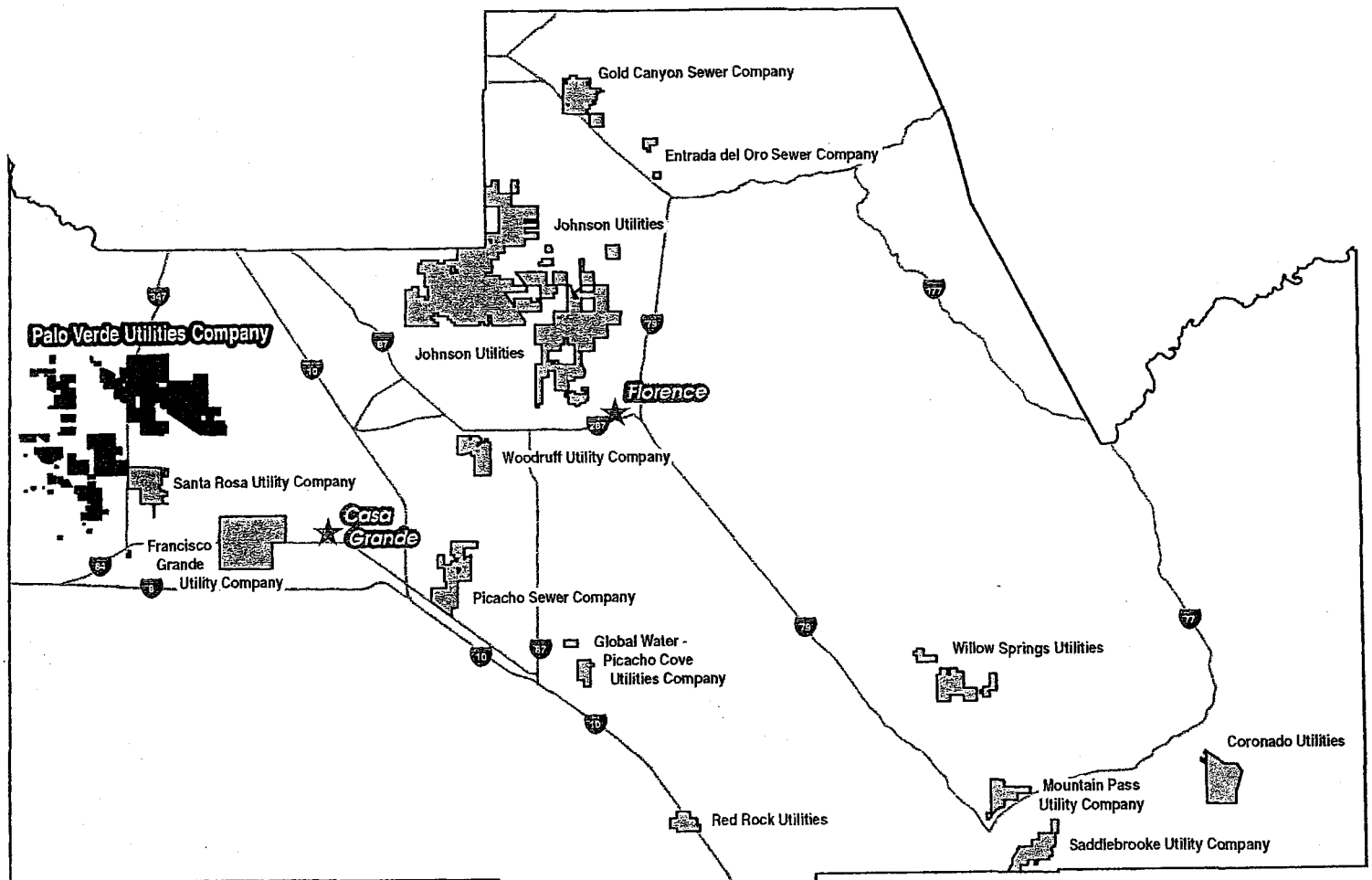


Figure 1: County Map



Figure 2: Certificated Area

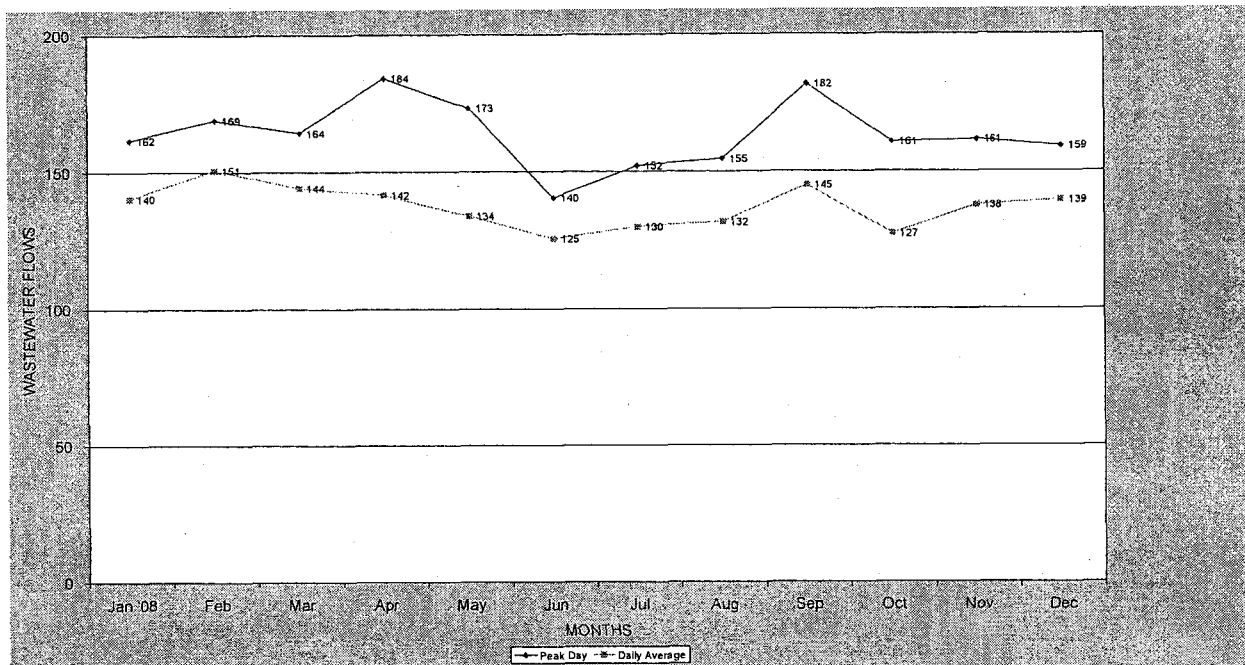


FIGURE 3
WASTEWATER FLOW